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ABSTRACT

This issue of "Social Sciences in Forestry" provides an annotated bibliographic listing of 660 current references arranged according to four major areas of forestry: (1) applications to forestry at large (containing citings on resources, history, legislation, policy, planning, appraisal and valuation, investment and finance, taxation, subsidization, agroforestry, economics, education, research, technology, and environmental concerns); (2) applications to forest management (with references on multiple use management, ownership of public and private lands, labor, and protection); (3) production of forest goods and services (addressing areas such as outdoor recreation, wilderness and range management, urban forestry, watershed management, fish and wildlife, and wood production); and (4) applications to forest industries (focusing on wood-using industries and other forest industries, wood energy, marketing and trade, and transportation). Each major area is further subdivided into a total of 42 subheadings. A cumulative author index covering all 1987 listings (2584) is provided. (TW)

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PREFACE

References submitted by foreign coorperators are acknowledged by the addition of the cooperator's initials directly following the annotation. We welcome contributions of either references to publications or the publications themselves. We would also welcome additional foreign cooperators, particularly from countries not represented on the title page of this issue. Anyone interested in serving as a cooperator should write to us at the University of Minnesota Forestry Library, 1530 North Cleveland Avenue, St. Paul, MN 55108.

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We gratefully acknowledge the contributions of two people who have helped to bring this issue to press: Heidi Peissig, data entry operator, and Marian Eriksson, programmer.

Jean Albrecht
Patricia Rodkewich

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SOCIAL SCIENCES APPLIED TO FORESTRY AT LARGE

GENERAL PUBLICATIONS

1924 Canadian Forestry Service, 1987. **Selected forestry statistics Canada 1986.** Canadian Forestry Service, Economics Branch, Information Report E-X-38. 180 pp.

This report contains a series of tables on Canadian forest resources and related management activities, commodity production, shipments and trade, employment statistics by industry sector, selling price indexes, financial statistics, and economic indicators.

1925 Conrad, J.M. and Clark, C.W., 1987. **Natural resource economics: Notes and problems.** New York, Cambridge University Press. 231 pp.

Includes chapters on: Resource allocation and optimization; renewable resources; non renewable resources; environmental management; stochastic resource models.

1926 Enabor, E.E., 1986. **Forestry.** In: Youdeowei, A. et al., eds. Introduction to tropical agriculture. New York, Longman. pp.301-313.

Includes sections on the meaning and scope of forestry, forest resources and forest products, demand, supply and trade of forest products, and forest management techniques & constraints.

1927 Gregory, G.R., 1987. **Resource economics for foresters.** New York, Wiley. 477 pp.

Section headings include: Theory and the primary wood-based industries; Timber production; Economic guides to investment decisions; Nontimber products and multiple use; and, Some international aspects of forest economics.

1928 Kneese, A.V. and Sweeney, J.L., editors, 1985. **Handbook of natural resource and energy economics.** New York, Elsevier. Handbooks in Economics, vol.6. 2 vols., 755 pp.

Selected articles are indexed in this issue.

1929 Kossuth, S.V. and Pywell, N.A., comps., 1987. **Current topics in forest research: Emphasis on contributions by women scientists: Proceedings of a National Symposium, Gainesville, Florida, Nov.4-6, 1986.** U.S. Forest Service, General Technical Report SE-46. 197 pp.

Among the topics covered in the 34 papers included in this volume are sociology, economics, and policy. Selected papers are indexed in this issue.

1930 Mathews, E.E., editor, 1986. **Proceedings of the 1986 Southern Forest Economics Workshop, New Orleans, LA, April 16-18, 1986.** Raleigh, N.C., N.C. State University. 178 pp.

Selected papers are indexed in this issue.

1931 Meristem, A.P., 1987. **A comparison of the forest economy of Sweden and B.C.** Forest Planning Canada 3(2):17-19.

A comparison between timber supply and silvicultural performance of Sweden and British Columbia.

1932 Rankin, J.M., 1985. **Forestry in the Brazilian Amazon.** In: Prance, G.T. and Lovejoy, T.E., eds. Key environments: Amazonia. New York, Pergamon Press. pp.369-392.

1933 Richardson, D., 1987. **Forestry in Outer Mongolia.** Commonwealth Forestry Review 66:265-272.

1934 Salcedo G., S., 1983. **[The Latin American forestry scene.]** Ciencias Forestales 3(1):53-82.
In Spanish. Covers forest resources, forest industries, other products and services of the forest such as recreation and tourism.

1935 Seminaire agriculture et foret, 5th, Nancy, 1983. **Actes du seminaire agriculture et foret, Nancy, 20-21 April, 1983.** Nancy, Ecole Nationale du Genie Rural, des Eaux et des Forests. 398 pp.
Papers are in French or in English. Selected papers are indexed in this issue.

1936 Sharma, J.K., Nair, C.T.S., Kedharnath, S., and Kondas, S., editors, 1986. **Eucalypts in India: Past, present and future.** Peechi, Kerala, India, Kerala Forest Research Institute. 521 pp.
Proceedings of the National Seminar on Eucalypts in Indian Forestry - Past, Present and Future, held at Kerala Forest Research Institute, Peechi, Kerala, India, Jan.30-31, 1984. Includes sections on "Eucalypts in social forestry" and "Socio-economic and policy aspects of eucalypt cultivation".

1937 Uusitalo, M., editor, 1987. **Yearbook of forest statistics 1986.** Folia Forestalia 690. Official Statistics of Finland XVII A:18. 235 pp.
Provides an overall picture of forestry in Finland.

1938 Webster, H.H. and Chappelle, D.E., 1987. **Can forest resource economists help solve societal problems?** Renewable Resources Journal 5(4):13-18.

1939 Westoby, J.C., 1987. **The purpose of forests: Follies of development.** New York, Blackwell. 343pp.
A collection of papers relating to international forestry, written by Westoby over a 20 year period.

1940 Wilen, J.E., 1985. **Bioeconomics of renewable resource use.** In: Kneese, A.V. and Sweeney, J.L., eds. Handbook of natural resource and energy economics. 1:61-124.

FOREST RESOURCES: REGIONAL, NATIONAL, INTERNATIONAL

1941 Angele, F.E. and Inama, V.S., 1987. **Western Colorado: Forest statistics for state and private land, 1983.** U.S. Forest Service, Resource Bulletin INT-42. 42 pp.
Presents land area, timberland area, woodland area and other data for 12 counties in western Colorado.

1942 Benson, R.E., Green, A.W., and VanHooser, D.D., 1987. **Idaho's forest resources.** U.S. Forest Service, Resource Bulletin INT-39. 114 pp. + map.
Presents highlights of the forest resources of Idaho as of 1981.

1943 Brown, M.J., 1987. **Forest statistics for Northwest Florida, 1987.** U.S. Forest Service, Resource Bulletin SE-96. 50 pp.

1944 Bruenig, E.F. et al., 1987. **Ecologic-socioeconomic system analysis and simulation: A guide for application of system analysis to the conservation, utilization and development of tropical and subtropical land resources in China.** Bonn, UNESCO Programme on Man and the Biosphere (MAB), Deutsches National-komitee, MAB-Mitteilungen no.24. 388 pp.
Compiled from the proceedings of the China Resources Conservation, Utilization and Development Seminar, Guangzhou, China, Feb.-Mar., 1986. Co-authors are: H. Bossel, K.P. Elpel, W.D. Grossmann, T.W. Schneider, Z.H. Wang, and Z.Y. Yu.

1945 Conner, R.C. and Waters, S.H., 1987. **Colorado's northern Front Range: Forest statistics for state and private land, 1983.** U.S. Forest Service, Resource Bulletin INT-41. 46 pp.
Presents highlights of the forest resources of the northern Front Range of Colorado.

1946 Conner, R.C. and Pawley, W.T., 1987. **Colorado's southern Front Range: Forest statistics for state and private land, 1983.** U.S. Forest Service, Resource Bulletin INT-43. 46 pp.
Presents land area, timberland area, woodland area and other data.

1947 Conner, R.C. and Brown, S.S., 1987. **West-central Colorado: Forest statistics for state and private land, 1983.** U.S. Forest Service, Resource Bulletin INT-44. 47 pp.
Presents land area, timberland area, woodland area and other data for 14 counties in west-central Colorado.

1948 Food and Agriculture Organization, 1986. **Report on natural resources for food and agriculture in the Asia and Pacific region.** FAO Environment and Energy Paper no.7. 118 pp.
Chapter 4 (pp.31-41) is on forest resources.

1949 Food and Agriculture Organization, 1986. **Report on natural resources for food and agriculture in Latin America and the Caribbean.** FAO Environment and Energy Paper no.8. 102 pp.
Chapter 2 (p..12-20) is on forest resources.

1950 Fowler, J.M., Peacock, B.E., and Schaber, M.J., 1985. **Pinyon-juniper woodland type in New Mexico: Asset or liability.** New Mexico Agricultural Experiment Station, Bulletin 718. 61 pp. + app.
"This study describes current P-J woodlands ownership and use patterns in New Mexico. In addition, the authors tried to develop linear optimization techniques to evaluate potential utilization patterns. (p.8)

1951 Hall, O.F. et al., 1987. **Virginia's forest and wildlife resources; present and future.** Virginia Polytechnic Institute and State University, School of Forestry and Wildlife Resources. 25 pp.
Co-authors are: R.L. McElwee, H.W. Wisdom, F.M. Lamb, and L.A. Nielsen.

1952 Hartwig, F., 1986. **[75 years of forestry in Chile.]** Forstarchiv 57:236-243.
In German. The article gives a historical retrospective view and a summary of the most important forest political goals in Chile. (WK,WK)

1953 Hees, W.W.S. van, 1987. **Timber resource statistics for the Upper Volta timber inventory unit, Alaska, 1980.** U.S. Forest Service, Resource Bulletin PNW-RB-146. 60 pp.

1954 Kelly, J.F. and Hines, F.D., 1987. **Forest statistics for Central Mississippi counties - 1987.** U.S. Forest Service, Resource Bulletin SO-127. 34 pp.

1955 Kelly, J.F. and Hines, F.D., 1987. **Forest statistics for Southwest Mississippi counties - 1987.** U.S. Forest Service, Resource Bulletin SO-128. 33 pp.

1956 Kinni, A. and Seve, J.E., 1987. **Perspectives on the forest resource sector in the Republic of Niger.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.52-60.

1957 Kuusela, K., Mattila, E., and Salminen, S., 1986. **[Forest resources in North Finland by Forestry Board Districts, 1982 to 1984.]** Folia Forestalia 655. 86 pp.
In Finnish, with English summary.

1958 Liu, M.N., 1986. **A cost-effective sampling design with model-dependent approach in estimating forest resources.** Ph.D. thesis, Colorado State University; Ann Arbor, MI, University Microfilms International. 178 pp.

1959 Lord, R.C., 1987. **The South's Fourth Forest: A look to the future.** Southern Lumberman 248(12):30-33.
A commentary on the draft report recently released by the U.S. Forest Service. The study reviews historical changes in the forest industry and presents projections of timber supply, demand, and prices to 2030.

1960 Louisiana Office of Forestry, 1986. **Louisiana's forest: Opportunity for progress.** Louisiana Dept. of Natural Resources, Office of Forestry. 13 pp.

A document published to inform the public of the status of Louisiana's forestlands based on a recently completed ten-year inventory.

1961 Meicherczyk, R., 1986. [Forestry and general settings of development aid policy in Paraguay.] Forstarchiv 57:231-235.
In German. (WK,WK)

1962 Oswald, D.D., Hegyi, F., and Becker, A., 1986. **The current status of coast Douglas-fir timber resources in Oregon, Washington, and British Columbia.** In: Douglas-fir: Stand management for the future. University of Washington, Institute of Forest Resources, Contribution 55:26-31.

1963 Singh, A., 1986. **Assessment of tropical forest resources.** Myforest 22:217-225.

1964 Tansey, J.B. 1986. **Forest statistics for the Piedmont of South Carolina, 1986.** U.S. Forest Service, Resource Bulletin SE-89. 53pp.

1965 Texas Forest Service, 1987. **East Texas forests: Status and trends 1986.** Texas Forest Service, Circular 276. [12] pp.

1966 VanHooser, D.D., 1987. **Timberland and woodland resources outside National Forests in northwestern New Mexico, 1987.** U.S. Forest Service, Resource Bulletin INT-46. 62 pp.

HISTORY

1967 Alexander, T.G., 1987. **The rise of multiple-use management in the Intermountain West: A history of Region 4 of the Forest Service.** U.S. Forest Service, FS-399. 267 pp.
The 1908 reorganization of the Forest Service created the Intermountain Region, or Region 4.

1968 Bocquet, A., 1987. [Man, forests and wood 5,000 years ago.] Revue Forestiere Francaise 39:457-464.
In French.

1969 Dargavel, J., 1987. **Australian sawmilling since 1850.** In: Schuler, A., ed. IUFRO Subject Group S6.07, Forest History, 18th IUFRO World Congress, 1986: Voluntary papers. pp.14-22.

1970 Dargavel, J., 1987. **Timber inspection and the state: The Tasmanian experience.** Journal of Forest History 31:164-172.
This article is a case history of timber inspection in Australia's island state of Tasmania.

1971 Hays, S.P., 1987. **Beauty, health, and permanence: Environmental politics in the United States, 1955-1985.** New York, Cambridge University Press. 630 pp.

1972 Husson, J.P., 1986. [Forests and foresters as seen by a learned society, the Societe d'Emulation des Vosges (1830-1900).] Revue Forestiere Francaise 38:483-489.
In French.

1973 Ishii, Y., 1987. Development of Hokkaido Prefectural Forests after World War II and its financial problems. In: Schuler, A., ed. IUFRO Subject Group S6.07, Forest History, 18th IUFRO World Congress, 1986: Voluntary papers. pp.31-37.

1974 Paananen, D.M., Fowler, R.F., and Wilson, L.F., 1987. The aerial war against Eastern Region forest insects, 1921-86. Journal of Forest History 31:173-186.

1975 Parde, J. and Pinon, J., 1987. [Urban forests and "diseases" of elms in Paris and elsewhere over 140 years ago.] Revue Forestiere Francaise 39:231-233.
In French.

1976 Perrault, E.G., 1985. Wood & water: The story of Seaboard Lumber and Shipping. Vancouver, Douglas & McIntyre. 320 pp.
A history of a consortium of British Columbia sawmills.

1977 Robbins, W.G., 1987. Lumber production and community stability: A view from the Pacific Northwest. Journal of Forest History 31:187-196.
Discusses early efforts in the Pacific Northwest to integrate lumber industry needs with public policy.

1978 Roller, K.J., 1986. Sopron chronicle: Hungarian foresters in the Western World 1919-1986. Part one: Hungarian foresters in Canada. Toronto, Rakoczi Foundation Inc. 204 pp.
Subtitled: "A successful freedom flight of a forestry school from Sopron, Hungary to Vancouver, British Columbia.

1979 Rubner, H., 1985. Greek thought and forest science. ER, Environmental Review 9:277-296.

1980 Schuler, A., editor, 1987. International Union of Forest Research Organizations, Subject Group S6.07, Forest History, 18th IUFRO World Congress, 1986: Voluntary papers. Zurich, Institut fur Wald-und Holzforschung, ETH-Zentrum. 71 pp.
Selected papers are indexed in this issue.

1981 Tucker, R.P., 1987. Major sources of deforestation in the Tropics since 1800. In: Schuler, A., ed. IUFRO Subject Group S6.07, Forest History, 18th IUFRO World Congress, 1986: Voluntary papers. pp.60-71.

1982 Zahorka, H., 1987. [Georg Ludwig Hartig (1764-1837).] Der Forst-und Holzwirt 42:210-214.
In German. An article written in memory of Hartwig, a German forester, who died 150 years ago. (WK,WK)

LEGISLATION

1983 Beuter, J., 1986. **Are state forest practices acts constitutional?** Forest Watch 6(8):15-18.

1984 Danaher, M.J., 1984. **River recreation - legal aspects of river management: A general overview of the rights involved and a developmental analysis of certain state and federal cases in the past.** In: Popadic, J.S. et al., eds. National River Recreation Symposium, 1984. Proceedings. pp.338-354.

1985 Haines, T.K. and Siegel, W.C., 1987. **State forest practice regulation - the Massachusetts and California cases.** In: Kossuth, S.V. and Pywell, N.A., comps. Current topics in forest research. U.S. Forest Service, General Technical Report SE-46:144-149.

1986 Hoysted, P.A., 1984. **The content and historical development of forest legislation in Tasmania.** In: Kellow, A.J., ed. Perspectives on forest policy in Tasmania. pp.31-64.

1987 Saussay, C. du, 1986. **[Forestry legislation of the Cape Verde Islands, Ethiopia, Gambia, Mali, Mauritania, Niger, Rwanda, and Senegal.]** Rome, Food and Agriculture Organization of the United Nations, Legislative Studies no.37. 98 pp.
In French.

1988 Simmons, R.M., 1984. **River recreation.** In: Popadic, J.S. et al., eds. National River Recreation Symposium, 1984. Proceedings. pp.327-337.
This paper "discusses the constitutional basis for federal regulation of river recreation, cases pertaining to such regulation, and the impacts of the appropriation doctrine on the river recreation." (p.327)

1989 Tlusty, W.G. and Rodgers, G.W., 1987. **Wisconsin woodlands: The Managed Forest Law program.** University of Wisconsin, Cooperative Extension Service, G3413. [6] pp.
Describes the law currently available to Wisconsin landowners wanting to take advantage of tax benefits.

POLICY

1990 Essmann, H., 1987. **[Forest policy aspects in soil conservation.]** Allgemeine Forst und Jagdzeitung 158:84-91.
In German, with summaries in English and French.

1991 Filius, A.M. and Santos Bento, J. dos, 1987. **Integration of socio-economic aspects in land evaluation: An application to afforestation in north Portugal.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.410-416.
"Financial, social and ecological criteria are incorporated in the land evaluation. The social criteria represent the competition

between forestry and agriculture for land." (p.410)

1992 Grandjean, A.J., 1987. **[Crown forests and Dutch forestry policy since 1945. Development and results.]** Revue Forestiere Francaise 39:219-230.
In French.

1993 Harries, D., 1984. **Clearfelling in Tasmania's dry forests: Analysis of a public policy decision.** In: Kellow, A.J., ed. Perspectives on forest policy in Tasmania. pp.125-144.

1994 Hyde, W.F., Boyd, R.G., and Daniels, B.L., 1987. **The impacts of public interventions: An examination of the forestry sector.** Journal of Policy Analysis and Management 7:40-61.
"This article measures welfare and distributive effects of public market interventions in forestry." (p.41)

1995 Kellow, A.J., 1984. **Factors affecting the making of forest policy in Tasmania.** In: Kellow, A.J., ed. Perspectives on forest policy in Tasmania. pp.1-8.

1996 Kellow, A.J., editor, 1984. **Perspectives on forest policy in Tasmania.** Hobart, University of Tasmania, Environmental Studies Occasional Paper 18. 168 pp.
A collection of papers, all of which are indexed in this issue.

1997 Knudson, D.M., 1987. **Dominican forest policy development and resource evaluation strategy.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.392-396.
"The purpose of this paper is to explain the strategy of the Dominican Republic in using its first major forestry research program to guide development of a policy for re-creating a forest resource base." (p.392)

1998 Mater, J., 1986. **The limiting factor: Policy, legislative, and regulatory response to forestry practices.** In: Douglas-fir: Stand management for the future. University of Washington, Institute of Forest Resources, Contribution 55:380-383.

1999 McCool, S.F. and Ashor, J.L., 1984. **Politics and rivers: Creating effective citizen involvement in management decisions.** In: Popadic, J.S. et al., eds. National River Recreation Symposium, 1984. Proceedings. pp.136-151.
This paper "discusses transactive planning as an alternative approach to resolving complex problems by providing an example of how it is being used in the Bob Marshall Wilderness Complex in Montana." (p.136)

2000 Miles, J., 1986. **The shifting political environment.** In: Forests of the Northwest: A time for reflection. Oregon State University, College of Forestry, 1986 Starker Lectures. pp.39-49.

2001 Nixon, B., 1987. **A scorecard for promised forest policy changes in British Columbia.** Forest Planning Canada 3(6):6-10.

2002 O'Toole, R., 1987. **Reforming the Forest Service. Part one: Reviewing the symptoms.** Forest Watch 7(9):15-22.

2003 Reid, A.C., editor, 1986. **Population change, natural resources, and regionalism.** Milford, Pennsylvania: Grey Towers Press, Breaking New Ground #1. 104 pp.
A discussion of the links between population and resources and their meaning for national and state policy.

2004 Rusli, B.M., 1985. **Forestry in federated Australia: Lessons for Malaysia.** Malaysian Forester 48(1):75-81.
"This paper highlights the favourable and unfavourable experiences of Australian forestry operating in a federal system of government. The lessons that Malaysian forestry could learn from these experiences are discussed." (p.75)

2005 Sutton, J.H., 1984. **An historical perspective on forest policy in Tasmania.** In: Kellow, A.J., ed. Perspectives on forest policy in Tasmania. pp.9-30.

2006 Zube, E.H. and Simcox, D.E., 1987. **Arid lands, riparian landscapes, and management conflicts.** Environmental Management 11:529-535.
"This article reports on a mail survey of the perceptions, attitudes, and opinions of the general public and special interest groups toward a riparian landscape in the Sonoran Desert." (p.529)

PLANNING

2007 Beuter, J.H. and Iverson, D.C., 1987. **FORPLAN: An economic perspective.** In: Hoekstra, T.W. et al., eds. FORPLAN: An evaluation of a forest planning tool. U.S. Forest Service, General Technical Report RM-140:87-95.
The author concludes that "FORPLAN is adequate for considering economic aspects of forest planning, but its application can be improved." (p.87)

2008 Binkley, C.S. and Hagenstein, P.R., 1987. **Economic analysis of the 1985 RPA program.** Journal of Forestry 85(11):25-27.

2009 Binkley, C.S., 1987. **The costs and benefits of a forest planning model: Discussant's comments.** In: Hoekstra, T.W. et al., eds. FORPLAN: An evaluation of a forest planning tool. U.S. Forest Service, General Technical Report RM-140:100-104.

2010 Blinn, C.R., 1987. **Computer applications in forest resource planning.** In: Northeastern Forest Resource Planners Conference, 1987. Broadening our horizons: Proceedings of the ninth annual...conference. pp.79-85.

2011 Booth, T.H., 1987. **Using the FAO/LUPLAN methodology for planning forest land use at the national level.** In: Lund, H.G. et al., eds.

Land and resource evaluation for national planning in the tropics. pp.370-373.

2012 Busby, R.L., 1986. **A critical review of the use of regional purchase coefficients for the construction of non-survey regional input-output models.** In: Mathews, E.E., ed. Proceedings of the 1986 Southern Forest Economics Workshop. pp.129-148.

"This paper critically reviews the econometric model that the Regional Science Research Institute uses to estimate the regional purchase coefficient for its input-output model." (p.129)

2013 Caballero-Deloya, M., 1987. **[Economic considerations for the evaluation of resources in tropical forests.]** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.297-301.

In Spanish, with English summary.

2014 Christensen, J.B., 1987. **[Plans for specific aspects of forestry and their integration with the general management plan for the enterprise for the impact of catastrophic events such as storm damage.]** Nederlands Bosbouwtijdschrift 59:58-62.

In Dutch, with English summary. Describes the creation of forest management plans in Denmark.

2015 Driscoll, R.S., Basa, V.F., and Singh, K.D., 1987. **Land use planning in the Philippines - a procedure and evaluation.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.309-316.

2016 Dulin, P., 1987. **Planning, monitoring and evaluating natural resources management activiities by field extension agencies in Honduras.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.456-463.

2017 Dunster, J.A., 1987. **Land use planning in Canada: An overview of the forestry aspects.** Land Use Policy 5:83-93.

"In this paper, questions of forest policy and tenure, land use planning strategies, external market forces and the developing debate about intensive forest management [are] briefly explored to see how these factors interrelate." (p.83)

2018 Ferell, R.S., 1986. **Use of economic analysis to implement Forest Service land management plans.** In: Mathews, E.E., ed. Proceedings of the 1986 Southern Forest Economics Workshop. pp.159-172.

"The purpose of this paper is to look at how economic analysis is being used in the land management planning process and to define areas where new techniques or methodologies will be required." (p.159)

2019 Fodgaard, S., 1983. **Land use competition between agriculture and forestry.** In: Seminaire agriculture et foret, 5th, Nancy, 1983. pp.73-83.

Results of this study show that "well-established agriculture and forestry as a whole are economically equal, except on poor soils where irrigation is not possible - here forestry is the better land use."

(p.73)

2020 Gibbs, C.J.N., 1986. **Changing forest land uses in rural development: A conceptual framework for land-use planners.** In: Pearce, A.J. and Hamilton, L.S., eds. Land use, watersheds, and planning in the Asia-Pacific Region. pp.21-32.
The author "outlines a conceptual framework for planning and implementing watershed management projects, as a particular example of development projects." (p.20)

2021 Gibbs, C.J.N., 1986. **The role of institutions and organizations in forest land-use change in the Asia-Pacific Region.** In: Pearce, A.J. and Hamilton, L.S., eds. Land use, watersheds, and planning in the Asia-Pacific Region. pp.11-19.
"The purpose of this paper is to highlight...the role of institutions and organizations in natural resource management." (p.11)

2022 Gray, G., 1987. **The effectiveness of statewide forest resource planning.** In: Northeastern Forest Resource Planners Conference, 1987. Broadening our horizons: Proceedings of the ninth annual...conference. pp.11-22.

2023 Gray, G.J. and Ellefson, P.V., 1987. **Statewide forest resource planning: The effectiveness of first-generation programs.** Minnesota Agricultural Experiment Station, Miscellaneous Publication 20. 7 pp.

2024 Hamilton, T.E., 1987. **Introduction to national land and resource management planning concepts.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.15-20.

2025 Hawaii Dept, of Land and Natural Resources, 1985. **Hawaii renewable resources research plan for the eighties.** Hawaii Dept. of Land and Natural Resources, Division of Forestry and Wildlife. 20 pp.
This report attempts "to define a forest conservation research program for Hawaii during the 1980's." (p.3)

2026 Hoekstra, T.W., Dyer, A.A., and LeMaster, D.C., editors, 1987. **FORPLAN: An evaluation of a forest planning tool: Proceedings of a Symposium, Nov.4-6,1986, Denver, Colorado.** U.S. Forest Service, General Technical Report RM-140. 164 pp.
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2027 Illinois Commission on Forestry Development, 1986. **Forestry in Illinois: Committee reports.** Illinois Commission on Forestry Development. 172 pp.
This is an appendix to the Commission's report "Forestry in Illinois: Opportunities for action", and contains the reports of the 5 working committees of the Commission: Education, multiple use, legislative, economic development, and forest resource analysis.

2028 Illinois Commission on Forestry Development, 1986. **Forestry in Illinois: Opportunities for action.** Illinois Commission on Forestry Development. 32 pp.

Final report to the Illinois General Assembly Dec.31,1986.

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This paper deals with management planning for small private forests in Norway. In Dutch, with English summary.

2030 Kirby, P.C., 1987. **Forest planning in an age of litigation.** In: Northeastern Forest Resource Planners Conference, 1987. Broadening our horizons: Proceedings of the ninth annual...conference. pp.94-101.

2031 Lahaussois, J.C., 1987. **Planning forest resources for forest products industries at national level.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.35-44.
"This paper reviews briefly the main aspects of planning in the forestry sector with emphasis on the forest products industries." (p.35)

2032 Lund, H.G., 1987. **Developing resource inventory policies for national land and resource evaluation and planning.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.491-498.

2033 Lund, H.G., Caballero-Deloya, M., and Villarreal-Canton, R., eds., 1987. **Land and resource evaluation for national planning in the tropics: Proceedings of the international conference and workshop, Chetumal, Mexico, Jan.25-31, 1987.** U.S. Forest Service, General Technical Report WO-39. 524 pp.
Topics covered include determining information needs, resource inventory, analysis and plan development, and implementation, monitoring, and maintenance.

2034 Lundgren, A.L., 1987. **International forestry: Planning for a better world.** In: Northeastern Forest Resource Planners Conference, 1987. Broadening our horizons: Proceedings of the ninth annual...conference. pp.38-46.

2035 Maine Bureau of Public Lands, 1985. **Planning policy for the public reserved lands of Maine.** Maine Dept. of Conservation, Bureau of Public Lands. 38 pp.

2036 Mather, A.S. and Murray, N.C., 1987. **The dynamics of rural land use change: The case of private sector afforestation in Scotland.** Land Use Policy 5:103-120.
"This paper reports results from a study of the effects of private sector afforestation schemes in Scotland in the 10-year period beginning 1975." (p.103)

2037 McCormick, J.F., 1987. **Implementation of integrated resource management in developing countries.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.499-501.
"Integrated resource planning and management can minimize environmental impacts and resource degradation associated with

economic development." (in the tropics) (p.499)

2038 Mgeni, A.S.M. and Price, C., 1987. **Land evaluation for industrial afforestation and reforestation programmes: A case study of Sao Hill Forest Project in Tanzania.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.476-480.
Describes the methodology used in "designing a planning scenario for forest project planning at the micro-level...through a case study of Sao Hill Forest Project - the largest state-owned industrial plantation in Tanzania." (p.476)

2039 Mok, S.T., 1986. **Sustained use and management of forests: A Malaysian perspective.** In: Pearce, A.J. and Hamilton, L.S., eds. Land use, watersheds, and planning in the Asia-Pacific Region. pp.34-43.
The author "gives an overview of the state of forest resources in Malaysia and outlines the legislative, institutional, and operational measures under which Malaysia's forests are managed." (p.33)

2040 Northeastern Forest Resource Planners Conference, 1987. **Broadening our horizons: Proceedings of the ninth annual...conference, Minneapolis, June 1-4, 1987.** U.S. Forest Service, State and Private Forestry. 131 pp.

2041 Olson, K.P. and Manthy, R.S., 1985. **Planning forest use in Michigan.** Michigan State University, Agricultural Experiment Station, Research Report 466. 7 pp.
A report on Statewide Forest Resources Plan published by the Michigan Dept. of Natural Resources in 1983.

2042 Painvinen, R., 1987. **Compiling a forest management plan for a Tanzanian softwood plantation.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.374-376.

2043 Pearce, A.J. and Hamilton, L.S., editors, 1986. **Land use, watersheds, and planning in the Asia-Pacific Region.** Honolulu, East-West Center, Environment and Policy Institute; Bangkok, FAO Regional Office for Asia and the Pacific, RAPA Report 1986/3. 230 pp.
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2044 Persson, L.O., 1983. **External control of rural land-trends, conflicts, consequences.** In: Seminaire agriculture et foret, 5th, Nancy, 1983. pp.363-373.
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2045 Pfeil, J.A., 1987. **Forest planning, public involvement and administrative appeals in the Eastern Region.** In: Northeastern Forest Resource Planners Conference, 1987. Broadening our horizons: Proceedings of the ninth annual...conference. pp.102-109.

2046 Rao, Y.S., 1986. **Some socio-economic and institutional aspects of forest land use.** In: Pearce, A.J. and Hamilton, L.S., eds. Land use, watersheds, and planning in the Asia-Pacific Region. pp.3-10.

2047 Sample, V.A., 1987. **Improving the link between RPA assessment findings and the RPA Program: The view from OMB.** Renewable Resources Journal 5(4):6-12.

2048 Sayre, T.W., 1987. **Public involvement - the Olympic National Forest assesses its efforts.** Journal of Forestry 85(11):5-7.
Reports on the public review and comment period following the release of the draft environmental impact statement for the proposed land and resource management plan of the Olympic National Forest.

2049 Sedjo, R.A., 1987. **FORPLAN: An evaluation of a forest planning tool - a summary.** In: Hoekstra, T.W. et al., eds. FORPLAN: An evaluation of a forest planning tool. U.S. Forest Service, General Technical Report RM-140:161-162.

2050 Shands, W.E., 1987. **The role of research in forest planning and policy.** In: Northeastern Forest Resource Planners Conference, 1987. Broadening our horizons: Proceedings of the ninth annual...conference. pp.74-78.

2051 Singh, K.D., 1987. **Land evaluation for forest resources development planning at national level.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.302-308.
This paper "first presents land evaluation procedures developed by FAO and then describes their potential applications to forestry land use planning." (p.302)

2052 Solheim, S.L., Alverson, W.S., and Waller, D.M., 1987. **Maintaining biological diversity in national forests: Applying island biogeography concepts in forest planning.** Forest Watch 7(9):9-14.
Excerpts from legal briefs and articles by S.A. Solheim, W.S. Alverson, and D.M. Waller, compiled by Lisa Schwartz.

2053 Sukiran, H.B. and Soeparmo, 1987. **The national forest sector development planning in Indonesia.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.450-455.

2054 Torrence, J., 1986. **Status of national forest planning and the impacts of planning on the competitive status of Washington's national forests.** In: Washington State Forestry Conference, 1986. Proceedings. pp.39-41.

2055 Whitby, M., 1983. **Land conversion to forestry in Britain: Some preliminary results.** In: Seminaire agriculture et foret, 5th, Nancy, 1983. pp.139-146.

2056 Williams, K.L. and Force, J.E., 1985. **Results of a survey on public participation in national forest planning processes.** University of Idaho, Wildlife and Range Experiment Station, Technical Report no. 18. [7]pp.
The survey addressed the following questions: What kinds of people participate in Forest Service planning? Why do they get involved? What methods of participation do they prefer?

2057 Wolfe, J.D., 1987. **The federal view of state forest resource planning: Washington, D.C. perspective.** In: Northeastern Forest Resource Planners Conference, 1987. Broadening our horizons: Proceedings of the ninth annual... conference. pp.51-60.

2058 Zaruba, C., 1987. **[Forest management planning in air-polluted areas.]** Nederlands Bosbouwtijdschrift 59:55-57.
This paper deals with forest management planning in Czechoslovakia. In Dutch, with English summary.

2059 Zhou, Z., 1987. **Land use in China.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.512-514.

APPRAISAL AND VALUATION

2060 Altwegg-Artz, D., 1987. **[The estimation of the consequences resulting from tree disease in alpine forests - importance and methods.]** Allegemeine Forst und Jagdzeitung 158:57-62.
In German, with English and French summaries. A short survey of various methods of evaluating the actual protective effect of forests and the costs resulting from the destruction of mountain forest, such as calculation of today's management costs, the willingness to pay method, the substitute cost approach and the reconstruction cost approach are discussed. (WK, WK)

2061 Brabander, H.D., 1987. **[Economic dimensions of forest damages in the Federal Republic of Germany and costs of rehabilitation measures.]** Forstarchiv 58:43-50.
In German. Forest damages caused by the forest decline will have consequences, until the next century. They are shown and evaluated in different scenarios. (WK,WK)

2062 Dobos, T., 1986. **[Economic expressibility of environment evaluation with special regard to forestry.]** Erdeszeti es Faipari Tudomanyos Kozlemenyek 1986(1):9-16.
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2063 Gayer, P.D., Haney, H.L., Jr., and Hickman, C.A., 1987. **Financial impact of current-use assessment of forestland in Virginia.** U.S. Forest Service, Research Paper SO-240. 10 pp.
"The general purpose of this study was to determine...how the current-use assessment of forest lands in Virginia affects the fiscal affairs of both individual property owners and local units of government." (p.3)

2064 Johansson, P.O., 1987. **Valuing public goods in a risky world: An experiment.** Sveriges Lantbruksuniversitet, Institutionen for Skogsekonomi, Arbetsrapport 68. 24 pp.
"This paper reports an attempt to estimate five different money measures of the value of preserving endangered species." (abst.)

2065 Kato, F., 1986. [About forest value calculation on the basis of conditions in the FRD - methods and problems.] Erdeszeti es Faipari Tudomanyos Kozlemenyek 1986(1):17-34.
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2066 Majer, A., 1986. [Aesthetic evaluation of the landscape.] Erdeszeti es Faipari Tudomanyos Kozlemenyek 1986(1):75-82.
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2067 Meszaros, K., 1986. [A method of the expressibility of economic value with special regard to forestry.] Erdeszeti es Faipari Tudomanyos Kozlemenyek 1986(1):67-74,
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2068 Smith, P.G.R. and Theberge, J.B., 1987. Evaluating natural areas using multiple criteria: Theory and practice. Environmental Management 11:447-460.
The authors examined 20 different conservation evaluation studies.

INVESTMENT AND FINANCE

2069 Baker, J.B., 1987. Production and financial comparisons of uneven-aged and even-aged management of loblolly pine. In: Proceedings of the Fourth Biennial Southern Silvicultural Research Conference, Atlanta, 1986. U.S. Forest Service, General Technical Report SE-42:267-273.

2070 Bush, R.J. and Sinclair, S.A., 1987. Capital budgeting practices of small-to medium-sized sawmills and pallet mills. Forest Products Journal 37(10):68-71.
"Sawmills and pallet mills in the eastern and southeastern United States were surveyed to determine their capital budgeting practices. It was found that discounted cash flow techniques have not been extensively adopted as primary methods of investment analysis." (p.68)

2071 Campbell, G.E. and Koenig, R.W., 1987. A financial analysis of three upland oak sites in southern Illinois. In: Proceedings of the Central Hardwood Forest Conference VI, Knoxville, TN, 1987. University of Tennessee, Dept. of Forestry, Wildlife and Fisheries; U.S.F.S. Southern Forest Expt. Station; Society of American Foresters. pp.149-158.
"This paper investigates the profitability of an even-aged upland hardwood management system under site and market conditions found in Illinois." p.149

2072 Campedel, D. and Merlo, M., 1983. [Small forestry investments in farms.] In: Seminaire agriculture et foret, 5th, Nancy, 1983.
In French, with English summary.

2073 Dippon, D.R. and Hassan, M., 1987. Ten years after midrotation

fertilization in slash pine plantations: When does it pay? In: Proceedings of the Fourth Biennial Southern Silvicultural Research Conference, Atlanta, 1986. U.S. Forest Service, General Technical Report SE-42:294-299.
The objective of this paper "is to determine if and when midrotation fertilization applications are financially sound investments." (p.294)

2074 Ferguson, I.S., 1986. **Financial returns from private investment in softwood plantations.** In: Private Forestry Investment Seminar, Melbourne, 1986. Proceedings. 12 pp.

2075 Hall, M.J., 1986. **Private sector investment forestry in Australia: A discussion on current taxes and incentives; status and future aims.** In: Private Forestry Investment Seminar, Melbourne, 1986. Proceedings. 13 pp.

2076 Heaps, T., 1986. **Cost-benefit analysis of growing coast Douglas-fir in British Columbia.** In: Douglas-fir: Stand management for the future. University of Washington, Institute of Forest Resources, Contribution 55:51-58.

2077 Hof, J.G. and Field, R.C., 1987. **On the possibility of using joint cost allocation in forest management decision making.** Forest Science 33:1035-1046.

2078 Klemperer, W.D., 1987. **Possible misinterpretations of equivalent annual incomes in inflationary times.** Northern Journal of Applied Forestry 4:210-211.

2079 Kula, E., 1987. **The developing framework for the economic evaluation of forestry in the United Kingdom - A reply.** Journal of Agricultural Economics 38:501-503.
A response to comments by Price.

2080 Lohmander, P., 1987. **The economics of forest management under risk.** Sveriges Lantbruksuniversitet, Institutionen for Skogsekonomi, Rapport 79. Var. pag.

2081 Lothner, D.C., Hoganson, H.M., and Rubin, P.A., 1986. **Examining short-rotation hybrid poplar investments by using stochastic simulation.** Canadian Journal of Forest Research 16:1207-1213.
The authors "examined and compared short-rotation hybrid poplar investments using standard discounted cash flow and stochastic simulation." (p.1207)

2082 Markus, L., 1986. **[Arboriculture cost-yield analysis by modelling.]** Erdeszeti es Faipari Tudomanyos Kozlemenyek 1986(1):35-41.
In Hungarian, with summaries in Russian, English, and German.

2083 Mengak, M.T., VanLear, D.H., Nodine, S.K., and Guynn, D.C., Jr., 1987. **Growth and economic comparisons of selected naturally and artifically regenerated stands.** In: Proceedings of the Fourth Biennial Southern Silvicultural Research Conference, Atlanta, 1986.

U.S. Forest Service, General Technical Report SE-42:283-289.
"This paper reports on spatial patterns, growth, and projected yields of loblolly pine in plantations and natural stands in the Piedmont of South Carolina, and compares rates of return on initial investments in regeneration." (p.283)

2084 Mitlin, D.C., 1987. **Price-size curves for conifers.** Forestry Commission Bulletin 68. 14 pp.
"This Bulletin describes the development of the long-term price assumptions used by the Forestry Commission (UK) for estimating future timber revenues." (p.5)

2085 Nodine, S.K. and Shearin, A.T., 1987. **Financial analysis of artificial pine regeneration and natural regeneration using improvement cuts.** In: Proceedings of the Fourth Biennial Southern Silvicultural Research Conference, Atlanta, 1986. U.S. Forest Service, General Technical Report SE-42:290-293.

2086 O'Toole, R., 1986. **What's wrong with cash flow?** Forest Watch 6(8):24-26.
The author enumerates what are in his opinion the "many reasons why cash flow is the wrong way of looking at below-cost timber sales." (p.24)

2087 Pratt, G., 1986. **Radiata pine forests - a viable long term investment.** In: Private Forestry Investment Seminar, Melbourne, 1986. Proceedings. 8 pp.

2088 Price, C., 1987. **The developing framework for the economic evaluation of forestry in the United Kingdom - a comment.** Journal of Agricultural Economics 38:497-500.
A comment on an article by Kula in the 1986 volume of Journal of Agricultural Economics.

2089 Private Forestry Investment Seminar, Melbourne, 1986. [Proceedings). Launceston, Australian Forest Development Institute. Various pagings.
Seminar held July 17,1986. Publication date not given.

2090 Roeder, A., 1986. **[Possibilities and limitations of building economic models.]** Allgemeine Forst Zeitschrift 41:1009-1013.
In German. Different kinds of economic models in forestry are presented, e.g. the Faustmann formula as archetype of the dynamic investment appraisal. (WK,WK)

2091 Venkataraman, K.G., 1986. **Investment criteria of Eucalyptus planting under farm forestry.** In: Eucalypts in India: Past, present and future. pp.279-281.

2092 Walker, J.L., 1986. **Financial considerations for Douglas-fir management: A private industry perspective.** In: Douglas-fir: Stand management for the future. University of Washington, Institute of Forest Resources, Contribution 55:39-42.

2093 Wheatley, A.V., 1986. **Pine plantations as an investment.** In:

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TAXATION

2094 Aronsson, T., 1987. **Forest taxation, neutrality and roundwood supply - an econometric analysis.** Sveriges Lantbruksuniversitet, Institutionen for Skogsekonomi, Rapport 76. 28 pp.
"This paper deals with forest taxation and its influence on the supply from private, nonindustrial forest owners in Sweden." (abstract)

2095 Condrell, W.K., 1987. **Estate taxes.** Forest Farmer 47(2):10-11,26-27.
The author concludes that "the heavy burdens already imposed by current estate tax laws interfere with providing an adequate supply of timber for the future." (p.27)

2096 Condrell, W.K., Tierney, J.E., and Siegel, W.C., 1987. **Timber and tax reform: An overview of recent changes.** Taxes - The Tax Magazine 65(7):411-433.
The authors provide a general guide to the changes in the tax treatment of timber income and expenditures resulting from the Tax Reform Act of 1986.

2097 Dangerfield, C.W., Jr. and Gunter, J.E., 1987. **New taxes - old timber.** American Tree Farmer 6(1):14-15.
"The purpose of this article is to translate tax changes wrought by the Tax Reform Act of 1986 into possible effects on levels of after-tax income for individuals selling timber in 1986, 1987, and/or 1988." (p.14)

2098 Dangler, B., 1987. **Taxes can make or break good forest management.** Northern Logger and Timber Processor 36(6):12,14,54-56.

2099 Daughtrey, Z.W., Bunn, R., and Martin, R.J., 1987. **The impact of the Tax Reform Act of 1986 on individual timber producers.** Journal of Agricultural Taxation and Law 9:234-253.
"This article focuses on the tax impact of legislative changes that affect individual timber producers. Significant tax provisions associated with timber production include capital gain treatment under Sections 631(a) and 631(b), amortization and reforestation tax credits, capitalization or expensing timber-related costs, income averaging, and the alternative minimum tax." (p.234)

2100 Franklin, E.C., 1987. **Tax planning for forest owners can brighten the profit picture.** Forest Farmer 47(2):12-13.

2101 Haney, H.L., Jr., 1987. **The new tax code and the forest farmer.** Forest Farmer 47(2):8-9,28-30.
Discusses changes brought about by the 1986 Tax Reform Act and how they affect timber owners.

2102 Hoover, W.L., 1987. **Tax developments: Tax reform '86.** Southern Lumberman 248(12):34-39.

2103 Jarck, W., 1987. **Effects of the new tax law on forest industry.** Forest Farmer 47(2):14-15.
Tax Reform Act of 1986.

2104 Lofgren, K.G. and Aronsson, T., 1987. **Tax distortions, optimal taxation, and timber supply in a simple model of the self-employed forest farmer.** Sveriges Lantbruksuniversitet, Institutionen for Skogsekonomi, Arbetsrapport 69. 16 pp.
The authors are interested in "how labor and timber supply are determined by the tax rates" and also in "how welfare is affected by different tax rates, and what optimal tax structure looks like." (p.2)

2105 Martin, R.J., 1986. **The impact of tax reform on individual timber producers.** Mississippi State University, Cooperative Extension Service, Forest Resources Management Technical Note 7-C, Forest Economics & Finance. 10 pp.

2106 McEvoy, T.J., 1987. **Timber income & the new tax law.** American Tree Farmer 6(1):16-17.
"The Tax Reform Bill of 1986 will have a substantial impact on the way woodland owners report income from timber sales and recover expenses associated with management." (p.16)

2107 Siegel, W.C., 1987. **Federal income tax treatment of silvicultural and related costs associated with intermediate stand management.** In: Proceedings of the Fourth Biennial Southern Silvicultural Research Conference, Atlanta, 1986. U.S. Forest Service, General Technical Report SE-42:305-308.
The distinction between capitalization and expensing, and between stand establishment and intermediate management are reviewed.

2108 Siegel, W.C., 1986. **Proposed timber changes in the federal income tax - background and current status.** In: Mathews, E.E.,ed. Proceedings of the 1986 Southern Forest Economics Workshop. pp.101-116.
"This paper examines the current scenario for reform of the federal income tax in terms of the implications for timber. It begins with a short history of the evolution of the present timber provisions of the law." (p.101)

SUBSIDIZATION

2109 Brodie, J.D., 1986. **Motivations for intensive management of Douglas-fir in the nonindustrial private sector.** In: Douglas-fir: Stand management for the future. University of Washington, Institute of Forest Resources, Contribution 55:43-45.

2110 Ellefson, P.V. and Risbrudt, C.D., 1987. **Economic evaluation of a federal natural resources program: The case of the Forestry Incentives Program.** Evaluation Review 11:660-669.
An evaluation of the cost-effectiveness and efficiency of the FIP.

2111 Harou, P., Brandl, H., and Steinlin, H., 1987. **[Incentives for private forest owners in the countries of the European Communities.]** Allgemeine Forst und Jagdzeitung 158:183-186.
In German, with English summary.

2112 Harou, P.A., 1987. **A possible methodology to justify and evaluate production incentives for private forests in the EEC.** In: Merlo, M. et al., eds. Multipurpose Agriculture and Forestry: Proceedings of the 11th Seminar of the European Association of Agricultural Economists 28 April-3 May, 1986. Wissenschaftsverlag Vauk Kiel. pp.501-510.

2113 Henly, R.K. and Ellefson, P.V., 1987. **State-administered forestry programs: Current status and prospects for expansion.** Renewable Resources Journal 5(4):19-23.
State forestry programs currently in widespread use include those involving education and technical assistance. Those programs not currently widely used among state governments are those involving financial incentives.

2114 McKillop, D.G. and Kula, E., 1987. **The importance of lags in determining the parameters of a planting function for forestry in Ireland.** Forestry 60:229-237.

ECONOMIC DEVELOPMENT

2115 Fahser, L., 1987. **[An ecological approach to forest economics.]** Forstarchiv 58:50-60.
In German with English summary. The obligation to sustained management calls for the integration of ecology and economy in the sense of complex house-keeping. (WK,WK)

2116 Food and Agriculture Organization, Forestry Department, 1986. **Forest industries in socio-economic development.** Unasylva 38(3,153):2-9.
This article reviews three major contributions made to socio-economic development by forest industries and by trade in forest products: employment, generation of economic surpluses, and provision of inputs to other sectors of the economy. The article is based on a paper by Frederick Keenan.

2117 Ladeira, H.P., 1985. **[Social aspects of tax exempted afforestation programs in the State of Minas Gerais.]** In: Barros, N.F.de, coord. Planted forests in the Neotropics. pp.326-347.

In Portuguese, with English summary. The author concludes that "forest activities based on the tax exemption have contributed with a considerable increase in job opportunities in the rural areas where planting is taking place." (p.327)

2118 Pastor, M.R., 1985. **[Social aspects of plantation forests in the neotropics.]** In: Barros, N.F. de, coord. Planted forests in the Neotropics. pp.317-325.

In Portuguese with English summary. "The objective of this paper is to discuss some social benefits generated by forest plantations, based on the experiences of the author in the Peruvian Andes." (p.317)

2119 Pelinck, E. and Dijk, K. van, 1987. **[International developments and Dutch policy on forestry development cooperation.]** Nederlands Bosbouwtijdschrift 59:240-248.

In Dutch, with English summary. This paper "presents a short historical overview of international trends in forestry development cooperation since the early 1950's." Most Dutch assistance is provided to 10 "programme countries" while about 40 other countries can qualify for smaller levels of assistance.

2120 Southgate, D.D. and Disinger, J.F., editors, 1987. **Sustainable resource development in the Third World.** Boulder, Westview Press. 177pp.

An international symposium addressing the technological and institutional challenges of sustainable development of natural resources in the Third World was held in Columbus, Ohio in Sept., 1985. This volume includes selected papers from the symposium.

SOCIAL AND COMMUNAL FORESTRY

2121 Dickinson, R. and Thirgood, J.V., 1987. **Women in forestry in the developing world.** Forestry Chronicle 63:362-364.

This report covers women's involvement and integration in reforestation and other development projects.

2122 Dogra, B., 1983. **Forests and people (a report on the Himalayas).** 2d rev. ed. New Delhi, Bharat Dogra. 88 pp.

2123 Fortmann, L.P., 1987. **Women in subsistence forestry.** Women in Forestry 8(4):12-14.

2124 Gregersen, H. and McGaughey, S.E., 1987. **Social forestry and sustainable development.** In: Southgate, D.D. and Disinger, J.F., eds. Sustainable resource development in the Third World. pp.7-20.

2125 Jha, L.K., 1986. **Incentives for social forestry in India.** Myforest 22:121-128.

2126 Jha, L.K., 1986. **Why social forestry?** Myforest 22:83-88.

2127 Laban, P., 1987. **[Rural forestry in Burkina Faso.]** Nederlands Bosbouwtijdschrift 59:265-275.
In Dutch, with English summary. Describes a Dutch village forestry project in Burkina Faso as a part of a national rural forestry program.

2128 Metin, R.L., 1987. **An important strategy: Farmers' participation in forestry programs.** Philippine Lumberman 33(5):14-22.
This paper reports on the Philippine Bureau of Forestry Development's integrated social forestry program, and particularly on how the people participate in that program.

2129 Sheehan, N., 1986. **A curriculum guide for a course on 'Gender roles in the community approach to forestry'.** Tropical Resources Institute, Yale School of Forestry and Environmental Studies, Working Paper no.16. 82 pp.

2130 Slade, R.H. and Campbell, J.G., 1986. **Monitoring and evaluation of social forestry in India - an operational guide.** Rome, Food and Agriculture Organization of the United Nations, FAO Forestry Paper no. 75. 218pp.
"This publication reproduces the operational guide to the monitoring and evaluation of social forestry which is being used throughout India." (p.iii)

2131 Snook, L.C., 1987. **Community forestry in Mexico's natural forests: The case of San Pablo Macuiltianguis.** In: Kossuth, S.V. and Pywell, N.A., comps. Current topics in forest research. U.S. Forest Service, General Technical Report SE-46:108-114.

2132 Vasavada, A., 1986. **Rainfed cultivation of Eucalyptus - a strategy for development of social forestry and improving socio-economic conditions of small marginal farmers.** In: Eucalypts in India: Past, present and future. pp.248-256.

2133 Wiersum, K., 1987. **[Renaissance in tropical forestry.]** Nederlands Bosbouwtijdschrift 59:229-239.
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AGROFORESTRY

2134 Alcock, M.B. and Thomas, T.H., 1987. **Agroforestry - with reference to sylvopastoral systems in the U.K.** Agricultural Progress 62:53-63.

2135 Brienza, S., Jr., Kitamura, P.C., and Dubois, J., 1985. **[Economic and biological considerations on an agro-forestry system to the Tapajos region.]** In: Barros, N.F. de, coord. Planted forests in the Neotropics. pp.261-275.
In Portuguese with English summary. Presents an agroforestry system suitable to small farmers.

2136 Chandler, T., 1987. **Ten years of agroforestry.** Forest Planning Canada 3(6):24-26.
Reports on the work of the International Council for Research in Agroforestry since its founding in 1977.

2137 Evans, P.T., 1987. **Agroforestry in Paraguay.** Women in Natural Resources 9(2):29-34.

2138 Fernandes, E.C.M. and Nair, P.K.R., 1986. **An evaluation of the structure and function of tropical homegardens.** International Council for Research in Agroforestry, Working Paper no.38. 35 pp. + vi pp.
Paper presented to the First International Workshop on Tropical Homegardens, Institute of Ecology, Padjadjaran University, Bandung, Indonesia 2-9 December, 1985.

2139 Fortmann, L. and Rocheleau, D., 1987. **Women and agroforestry: Four myths and three case studies.** Women in Natural Resources 9(2):35-44.
"This article reviews the literature on women's involvement in agroforestry and presents three case studies on the results of including or excluding women from agroforestry projects." (p.35)

2140 Green, D.A.G., and Jones, W.D., 1986. **Forestry as an alternative to farming in the hills and uplands of Wales.** Welsh Studies in Agricultural Economics 5:71-80.
Synopsis of a report with the same title issued by University College of Wales, Dept. of Agricultural Economics, 1986. (Previously indexed)

2141 Hardesty, L.H., Deffar, G., and Blatner, K.A., 1987. **A selected bibliography on analyzing joint production aspects of agroforestry systems.** Women in Natural Resources 9(2):11-19.

2142 Mendoza, G.A., 1987. **A mathematical model for generating land-use allocation alternatives for agroforestry systems.** Agroforestry Systems 5:443-453.

2143 Miner, C., 1987. **Agroforestry in Ecuador.** Women in Natural Resources 9(2):22-26.

2144 Nwonwu, F.O.C., 1987. **Cost minimization through the use of taungya system in pulpwood plantation establishment.** Agroforestry Systems

5:455-462.
"The costs and benefits of the use of three labour alternatives: direct permanent, direct casual and taungya labour in Gmelina arborea pulpwood plantation establishment in Nigeria were investigated." (p.455)

2145 Raintree, J.B. and Torres, F., 1986. **Agroforestry research in farming systems perspective: The ICRAF approach.** International Council for Research in Agroforestry, Working Paper no.39. 30 pp.
Paper presented to the IARC Workshop on Farming Systems ICRISAT, Patancheru, India, Feb., 1986.

2146 Raintree, J.B., editor, 1987. **D&D user's manual: An introduction to agroforestry diagnosis and design.** Nairobi, International Council for Research in Agroforestry. 110 pp.

2147 Saplaco, S.R., 1986. **Agroforestry: A sustainable productive and protective land use for uplands.** In: Pearce, A.J. and Hamilton, L.S., eds. Land use, watersheds, and planning in the Asia-Pacific Region. pp.139-156.

2148 Whitmore, J.L. and Burwell, B., 1986. **Industry and agroforestry.** Unasylva 38(3,153):28-34.
Agroforestry techniques generally operate at one of three levels: (1) agroforestry practiced by small farmers; (2) agroforestry promoted by local government; and (3) large-scale agroforestry efforts by the private sector. This industrial agroforestry is the subject of this article.

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2149 European Community, 1986. **Memorandum forestry: Discussion paper on the community action in the forestry sector.** Newsflash Green Europe no.36. 101 pp.
Undated; probable date, 1986.

2150 Grossmann, W.D., 1987. **"PROTO" - a forest sector prototype model.** In: Bruenig, E.F. et al. Ecologic-socioeconomic system analysis and simulation. pp.365-388.
Describes the model "PROTO" which was developed for country specific forest sector analysis.

2151 Johnson, J.A. and Price, C., 1987. **Afforestation, employment and depopulation in the Snowdonia National Park.** Journal of Rural Studies 3:195-205.
"The relationships between the provision of employment opportunities in agriculture and forestry and the process of depopulation in the Snowdonia National Park are examined. (p.195)

2152 Laurent, D., 1985. **ASEAN wood production: Rival or partner?** Bois et Forets des Tropiques 210:29-50.
Intended to give an overview of "the dynamics of the ASEAN timber

sector, ie. resources, output, processing, and international trade." (p.30)

2153 Laurent, D., 1985. **Indonesian Merantis: Where do you come from and how are you harvested?** Bois et Forets des Tropiques 210:111-130.
The author begins with an overview of the importance of Indonesia in geographical and economic terms and briefly describes the development of forest production, timber industry and trade over the last 20 years. He also reviews the objectives of Indonesian policy regarding the development of forestry production, timber processing and the timber trade.

2154 Mather, A.S., and Murray, N.C., 1987. **Employment and private-sector afforestation in Scotland.** Journal of Rural Studies 3:207-218.
"The aim of this paper is to consider the implications of afforestation for rural employment. It is concluded that afforestation involves neither the loss nor gain of jobs at the local level in a large majority of afforestation schemes." (p.207)

2155 Meicherczyk, R., 1987. **[Forestry and forest industries in Paraguay and the international cooperation.]** Forstarchiv 58:183-189.
In German, with English summary.

2156 Musokotwane, I.E.O. and Kufakwandi, S.F., 1986. **The importance of the Teak Forests in the Zambian economy.** In: The Zambezi Teak Forests: Proceedings of the First International Conference on the Teak Forests of Southern Africa, Livingstone, Zambia, 1984. Ndola, Zambia, Forest Dept. pp.375-383.

2157 National Forest Sector Strategy Task Force, 1987. **A national forest sector strategy for Canada - July 1987.** Forestry Chronicle 63:310-333.
In English and French.

2158 Purushotham, A., 1986. **Forestry in India for the 21st Century.** Indian Journal of Forestry 9:183-203.

2159 Remington, S.B. and Sendak, P.E., 1984. **Massachusetts timber economy: A review of the statistics.** U.S. Forest Service, Northeastern Forest Experiment Station; Massachusetts Division of Forests and Parks. 28 pp.
A summary of information relating to the forest resources of Massachusetts and to the timber-based industries of the state.

2160 Remington, S.B., Sendak, P.E., and Schumann, D.R., 1985. **Connecticut's timber economy: A review of the statistics.** U.S. Forest Service, Northeastern Forest Experiment Station; Northeastern Area State and Private Forestry. [5] pp. + 14 tables.
Summarizes data on the state's forests and its timber-based industries and measures the economic significance of timber in relation to other industries in Connecticut.

2161 Remington, S.B., Sendak, P.E., and Schumann, D.R., 1985. **Rhode Island's timber economy: A review of the statistics.** U.S. Forest

Service, Northeastern Forest Experiment Station; Northeastern Area State and Private Forestry. [5] pp. + 14 tables.

"This report summarizes the information on the forests of Rhode Island and the State's timber-based industries. It also measures timber's economic significance, especially in relation to the other industries in Rhode Island." (p.1)

2162 Schreuder, G.F. and Vlosky, R.P., 1987. **Forest products sector profile of Taiwan**. University of Washington, College of Forest Resources, CINTRAFOR Working Paper no.9. 42 pp.

2163 Schreuder, G.F., Vlosky, R.P., and Youn, Y.C., 1987. **Forest products sector profile of South Korea**. University of Washington, College of Forest Resources, CINTRAFOR Working Paper 10. 86 pp.

2164 Thomas, C. and Waggener, T.R., 1987. **Malaysian forest products sector and trade profile**. University of Washington, College of Forest Resources, CINTRAFOR Working Paper 12. 100 pp.

PROFESSIONAL ACTIVITIES, EDUCATION, EMPLOYMENT

2165 American Pulpwood Association Inc., 1987. **The decision to hire: Desired elements in a candidate for industrial forestry employment**. Washington, DC, American Pulpwood Association, [Special Project] 87-A-9. 9 pp.

A report on an opinion survey of selected APA members.

2166 Friedman, S., 1987. **Towards a humanist structure for forest science**. Women in Forestry 8(4):4-5.

2167 Garcia, M.W., 1987. **Women in national forest planning**. Women in Forestry 8(4):31-34.

2168 Gitelson, R., 1987. **1986 SPRE study: P & R programs in higher education**. Parks & Recreation 22(11):38-42.

This is part of an ongoing study begun in the 1960s to monitor park, recreation, and leisure studies programs in higher education in the U.S. and Canada.

2169 Jordan, G.A., 1987. **Computer-assisted learning in professional forestry education at the University of New Brunswick**. Forestry Chronicle 63:356-359.

2170 Kennedy, J.J. and Mohai, P., 1987. **Mentors and career development**. Journal of Forestry 85(12):23-26.

"Research at Utah State University...confirms that having a mentor was beneficial to the job satisfaction and career development of more than 200 USDA Forest Service employees surveyed." (p.23)

2171 Maine Division of Economic Analysis and Research, 1986. **Careers in the Maine woods: An outline of career opportunities in the wood**

harvesting industry. Maine Dept. of Labor, Bureau of Employment Security, Division of Economic Analysis and Research. 16 pp.
Undated, 3rd edition; probable publication date is 1986.

2172 Mayer, J., 1987. **Who are tomorrow's foresters and what do they want? A sociologist looks at two forestry schools.** Forestry Chronicle 63:372-375.
First and final year students at UBC and Lakehead Schools of Forestry were surveyed.

2173 Narayana, G.V., 1986. **Report on the training in social forestry.** Myforest 22:89-93.

2174 Narayana, G.V., 1986. **Training and education in agro-forestry.** Myforest 22:33-36.
Reviews the need for agroforestry training in India.

2175 Perkins, J.H. and Roby, G.A., 1987. **Fire management training in international forestry.** Fire management Notes 48(1):18-20.
U.S. fire management agencies have been involved internationally in fire management for many years, both with Canada and Mexico and also with countries which do not share our borders. Along with U.S. involvement in fire suppression in these countries have come requests for fire suppression training. This article describes several international training courses.

2176 Steiner, K.C. and Bowersox, T.W., 1987. **Setting educational objectives for forestry curricula.** Journal of Forestry 85(12):38-40.

2177 Todter, U., 1987. **The need for international studies in forestry.** In: International Forestry Students Symposium, 15th, 1987. Proceedings. pp.242-250.

2178 U.S. Forest Service, 1986. **Equal opportunity is for everyone: 1986 civil rights report.** U.S. Forest Service. 80 pp.

2179 U.S. National Park Service, 1987. **National Park Service career management concept.** U.S. National Park Service. 37 pp.

RESEARCH EVALUATION AND METHODOLOGY

2180 Bengston, D.N., 1985. **Economic evaluation of agricultural research: An assessment.** Evaluation Review 9:243-262.
Reviews the literature relating to evaluations of the economic impacts of investment in agricultural research which have been conducted during the past 30 years.

2181 Forestry Research Advisory Council of Canada, 1987. **First annual report to the Associate Deputy Minister, Canadian Forestry Service, August, 1986.** Hull, Quebec, Canadian Forestry Service, Research and Technical Services Directorate. 8 pp.

In English and French. The FRACC was established in 1983 to address forest research priorities and policies at a national level and to advise the Canadian Forestry Service.

2182 Gamal-Eldin, J. and Whetstone, D., 1987. **Guide to experts in forestry and natural resources.** U.S. Forest Service, Northeastern Forest Experiment Station; Northeastern Area State and Private Forestry, NE-INF-67-87. 14pp.

2183 Jakes, P.J. and Bengston, D.N., 1987. **Forestry research evaluation: Why and how?** In: Kossuth, S.V. and Pywell, N.A., comps. Current topics in forest research. U.S. Forest Service, General Technical Report SE-46:137-140.

2184 O'Laughlin, J., Rule, L.C., and Risbrudt, C.D., 1986. **U.S. Forest Service research: What proportion sustains (vs. enhances) productivity?** In: Mathews, E.E., ed. Proceedings of the 1986 Southern Forest Economics Workshop. pp.117-127.
Addresses the question: "By undertaking new research initiatives without additional resources, is the Forest Service sacrificing levels of technological effectiveness that have already been achieved and need to be sustained...?" (p.117)

2185 Oesten, G., 1986. **[Methodological principles in the research of Gerhard Speidel.]** Allgemeine Forst-und Jagdzeitung 157:225-231.
In German; English summary. (WK,WK)

2186 Seldon, B.J. and Newman, D.H., 1987. **Marginal productivity of public research in the softwood plywood industry: A dual approach.** Forest Science 33:872-888.
Evaluation of public research investments.

TECHNOLOGY TRANSFER AND EXTENSION

2187 Adams, N. and Dixon, R.K., editors, 1986. **Forestry networks: Proceedings of the First Network Workshop of the Forestry/Fuelwood Research and Development Project (F/FRED) Sept.24-27, 1986, Bangkok, Thailand.** [Arlington, VA] Winrock International Institute for Agricultural Development. 102 pp.

2188 Anderson, W.C., 1987. **Technical assistance by a county forester to nonindustrial forest owners in Mississippi.** U.S. Forest Service, Research Paper SO-239. 6 pp.

2189 Banda, A.S., 1986. **The role of forest extension in the protection and management of the Zambian Teak Forests.** In: The Zambezi Teak Forests: Proceedings of the First International Conference on the Teak Forests of Southern Africa, Livingstone, Zambia, 1984. Ndola, Zambia, Forest Dept. pp.401-415.

2190 Bentley, W.R., 1986. **Integrating the social sciences into MPTS**

research networking. In: Adams, N. and Dixon R.K., eds. Forestry networks. pp.53-57.

MPTS = Multipurpose tree species.

2191 Haymond, J.L., 1987. **Diffusion of innovations: A sociological approach to the nonindustrial private forests challenge**. In: Kossuth, S.V. and Pywell, N.A., comps. Current topics in forest research. U.S. Forest Service, General Technical Report SE-46:115-119.

"This paper presents results of a study designed to develop methodology to identify opinion leaders who own nonindustrial private forestland and to search for common traits, attitudes and values." (p.115)

2192 Ingram, C.D., Laarman, J.G., and Contezac, M.C., 1987. **Technology transfer: A case study of diversity**. In: Kossuth, S.V. and Pywell, N.A., comps. Current topics in forest research. U.S. Forest Service, General Technical Report SE-46:141-143.

This paper assesses the sources, growth, and subject matter of foreign requests for information and services from the Forest Products Laboratory in Madison for the period 1955-84.

2193 Lewis, B.J. and Ellefson, P.V., 1983. **Information for timber management and planning: An assessment of availability and adequacy in Minnesota**. University of Minnesota, Agricultural Experiment Station, Station Bulletin 547. 139 pp.

The intent of the authors was to provide "an initial look, from a statewide perspective, at the complex processes involved in the generation, organization, transfer, and use of information for the management of Minnesota's public forests." (p.127)

2194 Marx, H.G., 1987. **Guide to help develop a technology transfer plan**. U.S. Forest Service. 26 pp.

Undated; received in library, 1987.

2195 Matakala, P.W., 1986. **Problems of forest extension work in the Zambian Teak Forests**. In: The Zambezi Teak Forests: Proceedings of the First International Conference on the Teak Forests of Southern Africa, Livingstone, Zambia, 1984. Ndola, Zambia, Forest Dept. pp.416-426.

2196 Onweagba, A.E., 1985. **Communication support programme for agro-forestry development project in Nigeria**. Malaysian Forester 48(1):82-86.

A discussion of the Shelterbelt Forestry Project in Nigeria and the problems encountered because of a lack of public support due to poor communication. Among the types of communication support recommended are: Increasing clientele participation; extension communication; and institutional reorganization.

ENVIRONMENTAL CONCERNS

2197 Amrheim, P.J., 1987. **Ameliorating the environmental impact of refugee populations in tropical countries.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.484-490.

Discusses the impacts of refugee camps on the surrounding environment and suggests ways to ameliorate these impacts.

2198 Anderson, J.N., 1987. **Lands at risk, people at risk: Perspectives on tropical forest transformations in the Philippines.** In: Little, P.D. et al., eds. Lands at risk in the Third World: Local-level perspectives. Boulder, Westview Press. pp.249-267.

2199 Baden, J., 1986. **Destroying the enviroment: Government mismanagement of our natural resources.** Dallas, National Center for Policy Analysis, NCPA Policy Report 124. 45 pp.

"This study chronicles some of the most serious environmental damage caused by government policies, explains why such destruction generally does not occur on privately owned land, and makes proposals for systematic privatization...." (author's summary)

2200 International Forestry Students Symposium, 15th, 1987. **Proceedings: Forests in danger - human impact.** [Universitat Munchen, Forstwissenschaftliche Fakultat.] 274 pp.

Proceedings of a symposium held in Munich, April 21-25, 1987. Selected papers are indexed in this issue.

2201 Johansson, P.O., 1987. **The economic theory and measurement of environmental benefits.** New York, Cambridge University Press. 223 pp.

Includes information on travel cost method, renewable resources model, and estimating option prices for wildlife resources.

2202 Kneese, A.V. and Schulze, W.D., 1985. **Ethics and environmental economics.** In: Kneese, A.V. and Sweeney, J.L., eds. Handbook of natural resource and energy economics. 1:191-220.

2203 Leonard, H.J., 1987. **Natural resources and economic development in Central America: a regional environmental profile.** New Brunswick, NJ, Transaction Books. 279 pp.

Co-published with International Institute for Environment and Development. Sections include forestry aspects of land use and environmental consequences of economic development.

2204 Livingston, M.L., 1987. **The political economy of environmental impact assessment: Interest groups, uncertainty and transactions costs.** University of Minnesota, Dept. of Agricultural and Applied Economics, Staff Paper P87-39. 32 pp.

"The objective of this paper is to examine the EIS process in the context of game strategic behavior by interest groups and the coordinating function of decision rules. The transactions costs arising out of existing institutional arrangements are of particular interest." (p.2)

2205 Messerschmidt, D.A., 1987. **Conservation and society in Nepal: Traditional forest management and innovative development.** In: Little, P.D. et al., eds. Lands at risk in the Third World: Local-level perspectives. Boulder, Westview Press. pp.373-397.

2206 Nash, R., 1986. **The Europeanization of the American environment.** In: President's Commission on Americans Outdoors. Working papers. [3]pp.

2207 Poore, D., editor, 1986. **The vanishing forest: The human consequences of deforestation.** London, Zed Books Ltd. 89 pp.
A report for the Independent Commission on International Humanitarian Issues.

2208 Price, C., 1987. **Environmental benefits and optimal rotation: Comment on Johansson and Lofgren.** Journal of Environmental Management 25:215-218.
Comment on a publication by Johansson and Lofgren. Price contends that "optimal rotations will never be shortened by the inclusion of environmental values which are non-decreasing through the rotation." (p.215)

2209 Russell, H.E. and Associates, editor, 1986. **Environmental guidelines for afforestation projects.** Nairobi, United Nations Environment Programme, UNEP Environmental Management Guidelines no.9. 12 pp.

2210 Siebert, H., 1985. **Spatial aspects of environmental economics.** In: Kneese, A.V. and Sweeney, J.L., eds. Handbook of natural resource and energy economics. 1:125-164.

2211 Struhsaker, T.T., 1987. **Forestry issues and conservation in Uganda.** Biological Conservation 39:209-234.
"This paper reviews current trends in the policy and use of Uganda's forestry resource. Deforestation significantly exceeds reafforestation."

2212 Taylor, P.W., 1986. **Respect for nature: A theory of environmental ethics.** Princeton, NJ, Princeton University Press. 329pp.

2213 Vargas, A.M. and Winterbottom, R., 1987. **Country environmental profiles: A tool for resource assessment and national planning.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.464-471.
Describes the process of preparing environmental profiles based on the experience of the International Institute for Environment and Development.

2214 Wallach, B., 1986. **Deforestation: The view from south India.** Myforest 22:71-78.

2215 Whitney, J.B.R., 1987. **Impact of fuelwood use on environmental degradation in the Sudan.** In: Little, P.D. et al., eds. Lands at risk in the Third World: Local-level perspectives. Boulder, Westview Press. pp.115-143.

SOCIAL SCIENCES APPLIED TO FOREST MANAGEMENT

FOREST MANAGEMENT - GENERAL

2216 Maxwell, J., 1987. **An economic and ecological perspective on the renewability of forest ecosystems.** In: Kossuth, S.V. and Pywell, N.A., comps. Current topics in forest research. U.S. Forest Service, General Technical Report SE-46:131-136.
"The role of economic factors in forest management is evaluated from the standpoint of ecological considerations." (p.131)

2217 Schmidt, R., 1987. **Tropical rain forest management.** Unasylva 39(2,156):2-17.
"This article reviews management systems in selected areas of closed broad-leaved tropical forests." (p.2)

MULTIPLE USE MANAGEMENT

2218 Bowes, M.D. and Krutilla, J.V., 1985. **Multiple use management of public forestlands.** In: Kneese, A.V. and Sweeney, J.L., eds. Handbook of natural resource and energy economics. 2:531-569.
"This chapter is intended to provide a background in economic concepts specifically focused on the multiple use management of public forestlands." (p.531)

2219 Chico, E.G., Andres, O.L., Falero, M., and Solana, J., 1987. **Conflicts between productive and social uses of forests: A study of the effects of recreation on timber production in a recreational area of Spain.** In: International Forestry Students Symposium, 15th, 1987. Proceedings. pp.140-161.

2220 Hoekstra, T.W., Joyce, L.A., and Hamilton, T., 1987. **Estimation of regional multiresource interactions.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.386-391.
"A multiresource framework was developed to integrate natural resource models predicting the impact of timber and land management on timber, forage, wildlife, fish, and water for the southern United States." (p.386)

2221 Kaiser, H.F., 1987. **The importance of multiple use value in designing inventories.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.168-171.
"This paper examines the importance of multiple use benefits of the forests and the importance of properly considering these in designing a forest inventory." (p.168)

2222 Kazana, V., 1987. **Multi-objective programming for multiple use forest**

management. In: International Forestry Students Symposium, 15th, 1987. Proceedings. pp.162-172.

2223 Krutilla, J.V., 1986. **Multiple-use forest economics.** In: Forests of the Northwest: A time for reflection. Oregon State University, College of Forestry, 1986 Starker Lectures. pp.29-38.

2224 Miller, R.O., 1987. **Multiple use in the Bureau of Land Management: The biases of pluralism revisited.** In: Foss, P.O., ed. Federal lands policy. pp.49-59.

2225 Walther, P., 1987. **Against idealistic beliefs in the problem-solving capacities of integrated resource management.** Environmental Management 11:439-446.
The author "suggests that idealistic beliefs in the problem-solving capacities of IRM are not justified." (p.439)

OWNERSHIP

GENERAL ASPECTS

2226 Kreisl, R., 1983. **Historical development of property structure in Austrian forestry.** In: Seminaire agriculture et foret, 5th, Nancy, 1983. pp.101-110.

PUBLIC LANDS

2227 Baden, J. and Dana, A., 1987. **Toward an ideological synthesis in public land policy: The new resource economics.** In: Foss, P.O., ed. Federal lands policy. pp.1-20.

2228 Behan, R.W., 1987. **The polemics and politics of federal land management.** In: Foss, P.O., ed. Federal lands policy. pp.177-192.

2229 Brown, B.R., 1984. **Managing rivers and river users on the public lands.** In: Popadic, J.S. et al., eds. National River Recreation Symposium, 1984. Proceedings. pp.214-218.
This paper presents an overview of the Bureau of Land Management's river management program.

2230 Cawley, R.M. and Chaloupka, W., 1987. **Federal land policy: The conservative challenge and environmentalist response.** In: Foss, P.O., ed. Federal lands policy. pp.21-31.

2231 Connaughton, K.P., 1986. **Economic considerations for forest land management: One economists's view of U.S. public ownership.** In: Douglas-fir: Stand management for the future. University of Washington, Institute of Forest Resources, Contribution 55:46-50.

The author's purpose "is to examine the promises, realities, and difficulties of economically efficient public land management, and to draw some conclusions about the management of the public timber resource in western Oregon and Washington." (p.46)

2232 Dubourdieu, J., 1987. **[Planning the management of forests under state control. Development of management regimes.]** Revue Forestiere Francaise 39:204-208.
In French.

2233 Eckmullner, O., 1987. **[Publicly owned forest in Austria.]** Centralblatt fur das Gesamte Forstwesen 104:141-157.
Comparison of forest management in public and private forests in Austria. In German, with an English summary.

2234 Foss, P.O., editor, 1987. **Federal lands policy.** New York, Greenwood Press. Contributions in Political Science no.162. 205 pp.

2235 Francis, J.G., 1987. **Public lands institutions and their discontents.** In: Foss, P.O., ed. Federal lands policy. pp.61-76.
The author discusses the various issues relating to dissatisfaction with the existing land tenure system and land management system in the West.

2236 Ganzel, R., 1987. **Ideology and the politics of public lands.** In: Foss, P.O., ed. Federal lands policy. pp.33-46.

2237 Lo, S.L., Feng, F.L., and Tzeng, C.S., 1987. **[Studies on the cost allocation of national forest management in Taiwan.]** Quarterly Journal of Chinese Forestry 20:(1):53-63.
In Chinese with English summary.

2238 Nelson, R.H., 1987. **The future of federal forest management: Options for use of market methods.** In: Foss, P.O., ed. Federal lands policy. pp.159-176.
It is the author's contention that "the most important problems currently facing the Forest Service are issues of revenues and costs and the large deficits incurred in the management of the national forest system." (p.160)

2239 U.S. General Accounting Office, 1987. **Federal land management: Financial guarantees encourage reclamation of National Forest System lands.** U.S. General Accounting Office. 24 pp.
The GAO "found that the Forest Service requirement of financial guarantees is proving to be a successful incentive for getting mine operators to reclaim mine sites." (p.1)

2240 U.S. General Accounting Office, 1987. **Federal land acquisition: Land exchange process working but can be improved.** U.S. General Accounting Office. 72 pp.
A review of the programs used by the U.S. Forest Service and U.S. Department of the Interior to plan, negotiate, and implement land exchanges.

PRIVATE OWNERSHIP - GENERAL ASPECTS

2241 Ismail, M.S. and Abd. Rauf, S., 1985. **Privatization in the forestry sector: Opportunities, problems and implications.** Malaysian Forester 48(1):1-12.

2242 Zainal Aznam, B.Y., 1985. **Privatization and forestry development.** Malaysian Forester 48(1):48-56.

PRIVATE FORESTRY - INDUSTRIAL AND NONINDUSTRIAL

2243 Brandl, H., 1986. **[The importance of labour input by the owners of NIP-forests.]** Allgemeine Forst Zeitschrift 41:1201-1204.
In German. The article contains an economic analysis of forest properties managed by the owner's family. (WK,WK)

2244 Hyberg, B.T., 1987. **Multiattribute decision theory and forest management: A discussion and application.** Forest Science 33:835-845.
The procedures required to implement MDT are presented. MDT is then applied to the management of a stand of timber owned by a NIPF landowner who wanted to maximize both timber income and esthetic benefits. (abstract)

2245 Komaki, T., 1987. **Studies on the working system of private forests in Akamatu Forest Region - Managerial analysis of the private forests in Taneichi Town, Iwate Prefecture.** Research Bulletins of the College Experiment Forests, Hokkaido University 44:833-894.
In Japanese, with English summary.

2246 Kreisl, R., 1983. **The economic importance of the farm forest in Austria.** In: Seminaire agriculture et foret, 5th, Nancy, 1983. pp.231-237.

2247 Marsden, P., 1983. **Woodland management in England and Wales.** In: Seminaire agriculture et foret, 5th, Nancy, 1983. pp.247-255.

2248 Wallinger, R.S., 1987. **Forest industry supports efforts of private timberland owners.** Forest Farmer 46(10):6-7.
Highlights services offered by the southern (U.S) forest industry to forest farmers.

LABOR CONSIDERATIONS - WORK STUDIES

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2250 Kalousek, F., 1984. **[Raising the efficiency of managerial work.]** Acta Universitatis Agriculturae (Brno), Series C (Facultas Silviculturae) 53:185-190.
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The authors conclude that "while users can easily identify substitutes, explanations for why recreation opportunities are substitutable may not be easily found." (p.728)

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2289 Matulich, S.C., Workman, W.G., and Jubenville, A., 1987. **Recreation economics: Taking stock.** Land Economics 63:310-316.

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2293 McDonald, C.D., Hammitt, W.E., and Dotavio, F.D., 1984. **An individual's willingness to pay for a river visit.** In: Popadic, J.S. et al., eds. National River Recreation Symposium, 1984. Proceedings. pp.605-618.

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2296 Michigan Department of Natural Resources, 1985. **Building Michigan's recreation future: The 1985-90 Michigan Recreation Plan.** Michigan Dept. of Natural Resources. 30 pp.
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2297 Michigan Department of Natural Resources, Rec. Services Div., 1985. **Building Michigan's recreation future: The 1985-90 Michigan Recreation Plan. Appendix B: Recreation in Michigan: Users, activity, programs, and opportunities.** Michigan Dept. of Natural Resources. 125 pp.
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2299 O'Leary, J.T. and Behrens-Tepper, J.C., 1985. **Impact of recreation activity specialization on management and program support for water resources.** Purdue University, Water Resources Research Center Technical Report no.172. 50 pp.
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2300 Peterson, G.L. and Arnold, J.R., 1987. **The economic benefits of mountain running: The Pike's Peak Marathon.** Journal of Leisure Research 19:84-100.
"This paper reports willingness to pay for a trip to participate in the Pike's Peak Marathon as estimated by travel cost analysis of published 1981 to 1984 race results." (p.84)

2301 Popadic, J.S., Butterfield, D.I., Anderson, D.H., and Popadic, M.R., editors, 1984. **National River Recreation Symposium, Baton Rouge, LA, Oct.31-Nov.3, 1984. Proceedings.** Louisiana State University, School of Landscape Architecture. 740 pp.
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2302 President's Commission on Americans Outdoors, 1986. **Case studies.** President's Commission on Americans Outdoors. 173 pp.
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2304 President's Commission on Americans Outdoors, 1986. **Working papers**. Washington, DC, U.S. Government Printing Office. Various pagings. Selected papers are indexed in this issue.

2305 Raab, R.L. and Steinnes, D.N., 1987. **Recreational valuation of Minnesota waters**. University of Minnesota-Duluth, School of Business and Economics, Bureau of Business and Economic Research, Working Paper no.87-14. 50 pp.

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"Economic theory and data are used to consider equity and efficiency in pricing river recreation." (p.272)

2307 Shafer, E.L., 1987. **A decision design for tourism CEOs**. Journal of Travel Research 26(2):3-7.
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2308 Shomaker, J.H., 1984. **Writing quantifiable river recreation management objectives**. In: Popadic, J.S. et al., eds. National River Recreation Symposium, 1984. Proceedings. pp.249-253.

2309 Siehl, G.H. and Szwak, L.B., 1986. **Report on outdoor recreation demand: An overview**. In: President's Commission on Americans Outdoors. Working papers. [34] pp.

2310 Stokes, G.L. et al., 1984. **Planning and maintaining a river recreation spectrum: The Flathead Wild and Scenic River**. In: Popadic, J.S. et al., eds. National River Recreation Symposium, 1984. Proceedings. pp.90-105.
"This paper discusses application of the Recreation Opportunity Spectrum (ROS) and Limits of Acceptable Change (LAC) planning concepts to river planning and management." (p.90) Co-authors are: G. Walker, F. Flint, M. Weesner, R. Des Jardins, R. Hurd, M. Childress, and L. Reesman.

2311 Tambunan, M., 1986. **Targeting public investment: An application to recreational planning in Minnesota**. Ph.D. thesis, University of Minnesota. 257pp.
"The major objective of this dissertation is to develop an economic framework and operational model for evaluating investment in publicly supplied outdoor recreation." (p.i)

2312 Tindall, B. and Rogers, M., 1986. **Report on outdoor recreation supply: An overview**. In: President's Commission on Americans Outdoors. Working papers. [17] pp.

2313 U.S. Congress, 1987. **Recreation fee legislation.** U.S. Congress, 100th, 1st Session, Senate Report 100-86. 30 pp.
Report to accompany H.R.1320.

2314 U.S. National Park Service, 1987. **Land and Water Conservation Fund Grants-in-Aid Program: Report to Congress fiscal year 1986.** U.S. National Park Service. 52 pp. + appendices.
The L&WCF Act was enacted to ensure the accessibility of outdoor recreation resources to all U.S. citizens.

2315 VanderStoep, G.A. and Gramann, J.H., 1987. **The effect of verbal appeals and incentives on depreciative behavior among youthful park visitors.** Journal of Leisure Research 19:69-83.
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2316 Wallace, J.P., 1984. **Developing a river management plan in a regional context.** In: Popadic, J.S. et al., eds. National River Recreation Symposium, 1984. Proceedings. pp.110-115.

2317 Walsh, R.G., Sanders, L.D., and Loomis, J.B., 1984. **Measuring the economic benefits of proposed wild and scenic rivers.** In: Popadic, J.S. et al., eds. National River Recreation Symposium, 1984. Proceedings. pp.301-315.
"The purpose of this study was to develop economic measures of the benefits and costs of rivers to the general public." (p.301).

2318 Ward, F.A., 1984. **Optimally managing wild rivers for instream benefits.** In: Popadic J.S. et al., eds. National River Recreation Symposium, 1984. Proceedings. pp.285-300.
"This paper reports on a study which employed the travel cost method of estimating economic values from streamflow augmentation for whitewater angling and boating." (p.285)

WILDERNESS MANAGEMENT-NATURE CONSERVATION-NATIONAL PARKS

2319 Allin, C.W., 1987. **Wilderness preservation as a bureaucratic tool.** In: Foss, P.O., ed. Federal lands policy. pp.127-138.
A discussion of the bureaucratic competition over wilderness preservation between the National Park Service and the Forest Service.

2320 Brashler, J.G., 1986. **Managing the past in a natural resources management agency.** In: Howe, B.J. and Kemp, E.L., eds. Public history, an introduction.. Malabar, FL, Krieger. pp.145-157.
The author's objective is "to define the philosophy and requirements of cultural resources management (CRM) in a natural resources-land managing agency...." (p.145)

2321 Caldwell, L.K., 1986. **Corinthians reconsidered: Modern man relating**

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2322 Cole, D.N., Petersen, M.E., and Lucas, R.C., 1987. **Managing wilderness recreation use: Common problems and potential solutions.** U.S. Forest Service, General Technical Report INT-230. 60 pp.

2323 Dangler, H.W., 1987. **Sierra Club vs. Block, Wilderness water rights protected where not in conflict with purposes of national forest in Colorado.** Natural Resources Journal 27:441-456.
If the court decision is upheld the federally reserved right will place a new restriction on western states' control over their watersheds.

2324 Davis, C. and Davis, S., 1987. **Wilderness protection at what price? An empirical assessment.** In: Foss, P.O., ed. Federal lands policy. pp.113-125.
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2325 Fisher, A.C. and Krutilla, J.V., 1985. **Economics of nature preservation.** In: Kneese, A.V. and Sweeney, J.L., eds. Handbook of natural resource and energy economics. 1:165-189.

2326 Greenbaum, S., 1985. **Alaska National Interest Lands Conservation Act as amended, with an introduction and subject index by Sheldon Greenbaum.** U.S. Dept. of the Interior, Division of Information and Library Services. Unpaged.

2327 Haas, G.E., Driver, B.L., Brown, P.J., and Lucas, R.G., 1987. **Wilderness management zoning.** Journal of Forestry 85(12):17-21.
The authors believe that "wilderness managers must have flexibility to administer different areas differently."

2328 Huyck, H. and Pitcaithley, D., 1986. **National Park Service: Historians in interpretation, management, and cultural resources management.** In: Howe, B.J. and Kemp, E.L., eds. Public history, an introduction. Malabor, FL, Krieger. pp.358-374.

2329 Johnson, R.W., 1986. **History in the National Park Service: The Denver Service Center as a case study.** In: Howe, B.J. and Kemp, E.L., eds. Public history, and introduction. Malabor, FL, Krieger, pp.375-399.

2330 Lemons, J., 1987. **Title 16 United States Code Section 55 and its implications for management of concession facilities in Yosemite National Park.** Environmental Management 11:461-472.
This article examines the validity of this "very restrictive statute limiting concession facilities." (p.461)

2331 Myers, P. and Reid, A.C., 1986. **Yellowstone National Park: An endangered legacy.** In: President's Commission on Americans Outdoors. Case studies. pp.79-90.

2332 Pigram, J.J., 1987. **Countryside parks and multipurpose use of rural**

resources. In: Cocklin, C., Smit, B., and Johnson, T. Demands on rural lands: Planning for resource use. Boulder, Westview Press. pp.61-70.
A discussion of the recreational role of national parks in Australia.

2333 Pollard, D.F.W., 1987. The World Conservation Strategy and the forest sector in Canada. Forestry Chronicle 63:365-371.
"The objectives of the....WCS and the priority requirements and actions to achieve these objectives are examined from the viewpoint of forestry in Canada...." (p.365)

2334 U.S. Congress, 1987. National Park Service entrance fees: Hearing before the Subcommittee on Public Lands, National Parks and Forests...U.S. Senate, 100th Congress, 1st Session, on H.R.1320...April 27,1987. Washington, DC, U.S. Government Printing Office. 162 pp.

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2335 Ethridge, D.E., Pettit, R.D., Sudderth, R.G., and Stoecker, A.L., 1987. Optimal economic timing of range improvement alternatives: southern High Plains. Journal of Range Management 40:555-559.

2336 Kehmeier, P.N., Quigley, T.M., Taylor, R.G., and Bartlett, E.T., 1987. Demand for Forest Service grazing in Colorado. Journal of Range Management 40:560-564.
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2337 Rafsnider, G.T., Skold, M.V., and Sampath, R.K., 1987. Range survey cost sharing and the efficiency of rangeland use. Land Economics 63:92-101.

2338 Scifres, C.J., 1987. Decision-analysis approach to brush management planning: Ramifications for integrated range resources management. Journal of Range Management 40:482-490.

2339 U.S. General Accounting Office, 1986. Rangeland management: Profiles of federal grazing program permittees. U.S. General Accounting Office. 23 pp.

URBAN FORESTRY

2340 Dwyer, J.F., 1987. **How to make research and researchers work more effectively for you.** Journal of Arboriculture 13:267-273.
Paper presented to the Third National Urban Forestry Conference, Orlando, FL, 1986.

2341 Dwyer, J.F., 1985. **The economic value of urban plants.** In: Karnosky, D.F. and Karnosky, S.L., eds. Improving the quality of urban life with plants. pp.15-27.
The author defines value and shows how plant value varies throughout the urban environment. He then discusses how estimates of plant value can guide the management of the urban environment.

2342 Gerhold, H.D., Steiner, K.C., and Sacksteder, C.J., 1987. **Management information systems for urban trees.** Journal of Arboriculture 13:243-249.
"The concept and applications of computerized information systems for the management of urban trees are reviewed." (p.243)

2343 Harrison, C., Limb, M., and Burgess, J., 1987. **Nature in the city - popular values for a living world.** Journal of Environmental Management 25:347-362.
The authors conclude that "people value the natural world for several reasons, all of them related to the active enjoyment and inspiration that stems from the regular contact with a living world. People from all walks of life are fond of animals in particular...Plants do not hold the same fascination." (p.360)

2344 Kaplan, R., 1985. **Human response to plants and landscapes.** In: Karnosky, D.F. and Karnosky, S.L., eds. Improving the quality of urban life with plants. pp.45-60.

2345 Karnosky, D.F. and Karnosky, S.L., editors, 1985. **Improving the quality of urban life with plants: Proceedings of the June 21-23, 1983 International Symposium on Urban Horticulture.** [Bronx, NY] New York Botanical Garden. 200 pp.

2346 Lewis, C.A., 1985. **Human dimensions of horticulture.** In: Karnosky, D.F. and Karnosky, S.L., eds. Improving the quality of urban life with plants. pp.35-44.
The author views horticulture "from a human perspective which considers the ways in which plants interact with the human psyche." (p.35)

2347 Lindhult, M., 1987. **A microcomputer-based tree management system.** Journal of Arboriculture 13:304-309.
This paper outlines the creation of a microcomputer-based tree management system which links two software packages, dBASE III and AutoCAD, to create a tree management information system.

2348 Lofstrom, I., editor, 1987. **[Urban forestry.]** Folia Forestalia 693. 53 pp.
In Finnish with English summary. Examines "the present state of

research on urban forestry in Finland and abroad." The study is divided into a literature review and a research program.

2349 Smiley, E.T. and Baker, F.A., 1987. **Street tree inventories: The vital factor in urban forest management.** Arbor Age 7(10):12-14,16,18,20.

WATERSHED MANAGEMENT

2350 Asdak, C., 1987. **Biophysical relationships needed to perform economic evaluation of watershed management project: A case study in Indonesia.** Plan B Paper, University of Minnesota, College of Forestry. 108 pp.

The author concludes that much of the research dealing with the technical aspects of watershed rehabilitation or management has "not been organized and presented in a way which can be readily used by economists and decision makers." (p.88)

2351 Gibbs, C.J.N., 1986. **An introduction to economic aspects of forest land-use change in a watershed approach.** In: Pearce, A.J. and Hamilton, L.S., eds. Land use, watersheds, and planning in the Asia-Pacific Region. pp.171-176.

2352 Gregersen, H.M., Brooks, K.N., Dixon, J.A., and Hamilton, L.S., 1987. **Guidelines for economic appraisal of watershed management projects.** Rome, Food and Agriculture Organization of the United Nations, FAO Conservation Guide 16. 144 pp.

2353 Hamilton, L.S., 1986. **Towards clarifying the appropriate mandate in forestry for watershed rehabilitation and management.** Honolulu, East-West Center, East-West Environment and Policy Institute, Reprint no.94. 51 pp.

Reprinted from: Strategies, approaches and systems in integrated watershed management, FAO, 1986.

2354 Romm, J.M., Ewing, A., Yen, S.J., and Haberman, R., 1987. **The economic value of water in national forest management.** In: Proceedings of the California Watershed Management Conference, Nov.18-20, 1986, West Sacramento, CA. University of California, Berkeley, Wildland Resources Center, Report 11. pp.89-102.

"This paper identifies the economic value of water in the National Forest System of California and institutional factors that influence their effect on forest management." (p.89)

WILDLIFE AND FISH

2355 Hoekstra, T.W., Flather, C.H., and Flebbe, P.A., 1987. **Regional fish and wildlife habitat models: Application for national multiple resource planning.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.404-409.
"These models evaluate fish and wildlife impacts from predicted changes in land use and forest management. (p.404)

2356 Johansson, P.O., 1987. **Estimating how the value of a hunting permit is affected by the hunter's expectations.** Sveriges Lantbruksuniversitet, Institutionen for Skogsekonomi, Arbetsrapport 67. 39 pp.
"The purpose of this paper is to examine if and how the willingness to pay for a hunting permit is affected by the hunter's expectations as regards the outcome of the hunt." (p.4)

2357 Kaiser, H.F. et al., 1987. **Estimating prices for access to opportunities for hunting, fishing, and viewing wildlife on public and private lands.** U.S. Department of Agriculture. 26 pp.
Final report of the Natural Resources and Environment Steering Committee on Wildlife and Fish Access Prices, May 15, 1987. Committee members were: H.F. Kaiser, chairman, B. Greber, R.Guldin, R. Davis, D. Witter, B. Teels, L. Lee, and R. Randall.

2358 Ntiamoa-Baidu, Y., 1987. **West Africa wildlife: A resource in jeopardy.** Unasylva 39(2,156):27-35.
"This article reviews the wildlife management structures in the region and describes the priority research needs that must be met to maintain the resource." (p.27)

2359 Woods, J.J., 1987. **Commercial forests: Beyond the bottom line.** American Forests 93(9/10):30-34.
Wildlife management on commercial forest lands.

WOOD PRODUCTION

2360 Armstrong, F.H., 1987. **Is timber the highest and best economic use of Vermont forest properties?** Northern Journal of Applied Forestry 4:186-189.
The author concludes that "Until the next land boom, timber production will be the highest and best economic use for much of Vermont's forest." (p.189)

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2366 Edgar, J.G., 1984. **Social and environmental implications**. In: Hillis, W.E. and Brown, A.G., eds. Eucalypts for wood production. pp.377-389.
"Intensive wood production is a form of industrialized agriculture and, as such, has social and environmental implications in accordance with the nature, location, inputs, levels of care in production, output, and distribution patterns of the industry." (p.377)

2367 Ferguson, I.S. and Dargavel, J.B., 1984. **Economic considerations**. In: Hillis, W.E. and Brown, A.G., eds. Eucalypts for wood production. pp.363-374.
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2368 Flammarion, J.P., 1986. **[How to produce high quality softwood timber in an economic way.]** Revue Forestiere Francaise 38:423-438.
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2369 Harris, A.B., 1987. **A comparison of profitability for agricultural and forestry production on southern marginal cropland**. In: Kossuth, S.V. and Pywell, N.A., comps. Current topics in forest research. U.S. Forest Service, General Technical Report SE-46:120-126.
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2371 Hillis, W.E. and Brown, A.G., editors, 1984. **Eucalypts for wood production.** New York, Academic Press. 434 pp.
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2373 Leveque, F., 1983. **[Wood-cultivation in the agricultural production system.]** In: Seminaire agriculture et foret, 5th, Nancy, 1983. pp.239-245.
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2374 Lofgren, K.G., 1987. **On the economic value of genetical progress in forestry.** Sveriges Lantbruksuniversitet, Institutionen for Skogsekonomi, Rapport 74. 30 pp.
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2376 Moss, O.O., 1987. **Roundwood cut for sale and industrial production 1985-86.** Oslo, Statistisk Sentralbyra, Norges Offisielle Statistikk B712. 62 pp.
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2377 Oliveira, A.J. de and Couto, L., 1986. **[Simulation and economic comparison of forestry operations in Eucalyptus stands using the MANFLOR system - a case study.]** Instituto de Pesquisas e Estudos Florestais, IPEF 34:63-67.
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2378 Oliver, C.D. et al., 1986. **Silvicultural costs of growing Douglas-fir of various spacings, sites, and wood qualities.** In: Douglas-fir: Stand management for the future. University of Washington, Institute of Forest Resources, Contribution 55:132-142.
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2379 Schroeder, G., Seemann, S., and Spank, G., 1987. **[Economic comparison of the performance and yield of the Douglas-fir with pine and spruce**

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2384 Corcoran, T.J. and Nieuwenhuis, M.A., editors, 1985. **International Union of Forest Research Organizations Subject Area 3:04:00, North American and European Executive Session, University College, Dublin, Dept. of Forestry, 1985: A proceedings.** Maine Agricultural Experiment Station, External Publication Register #1034. 79 pp.
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2385 Donnelly, D.M., 1986. **Stand harvest scheduling using optimal control methods.** Ph.D. thesis, Colorado State University; Ann Arbor, MI, University Microfilms International. 190 pp.
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2387 Henderson, D.E. and Baughman, M.L., 1987. **Whole tree harvesting of the pinyon-juniper type: Economic and institutional considerations.** In: Proceedings - Pinyon-Juniper Conference, Reno, NV, Jan.13-16, 1986. U.S. Forest Service, General Technical Report INT-215:192-195.
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2388 Hirvonen, R. and Woods, R.A., 1987. **Timber harvest on federal lands 1981-1986.** Canadian Forestry Service, Federal Lands Forestry Branch. 52 pp., 54 pp.
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Paper Industry for Air and Stream Improvement, Technical Bulletin 514:52-57.

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2396 Peterson, J.T., 1987. **Harvesting economics: Grapple yarding second-growth timber**. Forest Engineering Research Institute of Canada, Technical Report TR-75. 26 pp.

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2404 Tufts, R.A., Sirois, D.L., and Stokes, B.J., 1987. **Productivity and cost of grapple skidders performing gate delimbing.** In: Proceedings of the Fourth Biennial Southern Silvicultural Research Conference, Atlanta, 1986. U.S. Forest Service, General Technical Report SE-42:313-318.

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2406 Bostrom, K., 1987. **Land requirements for industrial forestry.** In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.30-34.
This paper "describes a system for classification of forest lands at national or sub-national levels by which areas with potential for production of industrial wood are indicated." (p.30)

2407 Brooks, D.J., 1987. **SPATS: A model for projecting softwood timber inventories in the Southern United States.** U.S. Forest Service, Research Paper PNW-RP-385. 23 pp.
"This report documents a computer model that was developed to provide descriptive projections of future softwood timber inventories in the Southern United States." (p.1)

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2409 Cubbage, F.W., 1986. **Factors affecting timber supply elasticity.** In: Mathews, E.E., ed. Proceedings of the 1986 Southern Forest Economics Workshop. pp.149-158.

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2411 McMurray, S.K., 1984. **Allocating Tasmania's forest resource to sawlog.** In: Kellow, A.J., ed. Perspectives on forest policy in Tasmania. pp.65-96.
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Includes a section entitled "Timber: Heading off long-term economic scarcity", which focuses on timber supply issues.

2413 Reed, F.L.C., 1986. **The timber supply context of the lumber war of 1986.** In: Forests of the Northwest: A time for reflection. Oregon State University, College of Forestry, 1986 Starker Lectures. pp.9-27.

2414 Sutton, W.R.J., 1987. **Current and future wood supply trends in Australia, New Zealand, and Chile.** In: Proceedings of the Fourth Biennial Southern Silvicultural Research Conference, Atlanta, 1986. U.S. Forest Service, General Technical Report SE-42:16-23
The author concludes that "the 'threat' to North America from the forests of the South Pacific Rim is much less than many now believe." (p.16)

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2416 Thang, H.C., 1985. **Timber supply and domestic demand in Peninsular Malaysia.** Malaysian Forester 48(2):87-100.
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2417 Tworzyanski, T., 1987. **Annual cut versus forest depletion: Ontario's approach to wood supply analysis.** Canadian Forest Industries 107(9):565-566, 568-569.
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Subjects covered include: "Availability of national forest timber", "Economic impact of current trends in timber sales", "Environmental impact of federal timber sales", "Federal timber sales process", and "The appeals process".

2422 Moore, T., Nielsen, R., and Studier, D., 1987. **An evaluation of timber sale scheduling using the TRANSHIP computer model.** U.S. Forest Service, Engineering Technical Information System, Engineering Field Notes vol.19, Sept.-Oct., 1987, pp.23-30.
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SOCIAL SCIENCES APPLIED TO FOREST INDUSTRIES

WOOD-USING INDUSTRIES

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A look at the forest products industry of the Pacific Northwest. Reviews market conditions, changes in industry structure over the last 10 years, and prospects for the future.

2424 Astorga, I. and Tornero, J., 1986. **[A panoramic view of the timber industry in Spain,]** Revue Forestiere Francaise 38:490-502.
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2425 Baldwin, R.F., 1984. **Operations management in the forest products industry.** San Francisco, Miller Freeman Publications. 264 pp.
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2427 Bohmer, E., 1987. **A subjective forecast of the future of the Norwegian forest products industry or "Learning to operate between blue-eyed oil barrons".** Nordic Pulp and Paper Research Journal, Special Issue, Aug.6, 1987. pp.25-28.
Reviews the development of the Norwegian pulp and paper industry and discusses trends to the year 2000.

2428 Browne, J.L. and Downs, K.A., editors, 1986. **1986-87 international pulp and paper directory.** San Francisco, Miller Freeman. 514 pp.
World guide to the pulp and paper industry. Includes a mill index, a list of industry executives, information on expansion and modernization projects, etc.

2429 Burcham, V., editor, 1987. **Directory of primary wood using industries in Michigan.** Revised edition. Michigan Dept. of Natural Resources, Forest Management Division. 173 pp.

2430 Bush, R.J., Sinclair, S.A., Shaffer, R.M., and Hansen, B.G., 1987. **Equipment needs and capital expenditure budgets for eastern sawmills and pallet manufacturers.** Forest Products Journal 51(11/12):55-59.
A mail survey was used to gather information from sawmills and pallet manufacturers in the eastern and southeastern United States... The objective of the study was to provide information on equipment and capital needs of sawmills and pallet manufacturers." (p.55)

2431 Chelu, M.R.M., 1986. **Logging and sawmilling operations in the Teak Forests.** In: The Zambezi Teak Forests: Proceedings of the First International Conference on the Teak Forests of Southern Africa, Livingstone, Zambia, 1984. Ndola, Zambia, Forest Dept. pp.342-349.

2432 Corlett, M.L., editor, 1987. **Forest industries 1987-88 North American factbook.** San Francisco, Miller Freeman. 263 pp.
Begins with an economic overview of the wood products industry followed by chapters on capital spending, mergers and acquisitions, lumber production, wood-based panels, and imports and exports. The last two chapters are a wood products buyers' guide and a list of associations and organizations.

2433 D.G. Bell and Associates Inc., 1987. **Forest sector secondary industry development study.** Edmonton, Canadian Forestry Service, Northern Forestry Centre; Alberta Dept. of Forestry, Lands & Wildlife. 46 pp.
Date on title page, 1986; Copyright, 1987. "The purpose of this study is to identify specific business development opportunities in the province of Alberta for increased usage of provincial lumber and board products...." (p.1)

2434 Deppe, H.J., 1987. **[Problems and prospects for wood based materials in Europe.]** Holz als Roh-und Werkstoff 45:417-420.
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2435 Duchene, G.F., 1987. **What happened to Brazil's naval stores industry in 1985-87?** Naval Stores Review 97(5):12-14.

2436 Economic Commission for Europe and Food and Agriculture Organization, 1987. **Special issue: Survey of the wood-based panels industries - 1986.** Timber Bulletin 40(3):1-67.
A world survey. The 4 categories of wood-based panels considered in this report are particle-board, fibreboard, plywood, and veneer sheets.

2437 Ellefson, P.V. and Irving, F.D., 1987. **Forestry staffing of industrial wood-based companies: Experiences of seventy leading U.S. firms.** University of Minnesota, Dept. of Forest Resources, Staff Paper Series no.62. 12 pp.

2438 Folk, R.L. et al., 1987. **Manufacturing and marketing of wood fuel pellets.** University of Idaho, Forest, Wildlife and Range Experiment Station, Technical Report no.20. 28 pp. + app.
The authors' purpose was to develop background information "to serve as an initial reference source for forest industry managers contemplating the manufacture and marketing of wood fuel pellets." Co-authors are R.L. Folk, R.L. Govett, L.A. Aldrich, E.B. de Almeida, P.S. Carey, D.H. Cohen, M.M. Cortes, J.M. Fabricius, A.G. Koon, D.N. Pence, D.C. Ritter, and H.C. Sim.

2439 Food and Agriculture Organization, 1987. **Projected pulp and paper mills in the world 1986-1996.** Rome, Food and Agriculture Organization of the United Nations. 111 pp.

2440 Food and Agriculture Organization, 1987. **Pulp and paper capacities survey, 1986-1991.** Rome, Food and Agriculture Organization of the United Nations. 179 pp. + app.
Includes tables showing world production capacity for pulp and paper plus data for individual countries.

2441 Freitas, A.R. de, Kauman, W.G., and Youngs, R.L., comp., 1986. **Improved utilization of timber resources in South America: A programme for action.** [Vienna], International Union of Forest Research Organizations, Project Group P5.01, Properties and Utilization of Tropical Woods. 161 pp.
"Analysis shows that the contribution of the South American forest industries to the national economies of their countries is not commensurate with the potential of the resource." The authors are recommending a concerted effort be made to upgrade the South American forest industries.

2442 Gray, G.J., Ellefson, P.V., and Lothner, D.C., 1987. **Lake States wood product production and consumption: Trends and perspectives.** Northern Journal of Applied Forestry 4:193-197.
Estimates of primary and secondary wood product production and consumption are presented for Michigan, Wisconsin and Minnesota. The authors conclude that "Considerable opportunity exists for expanding and diversifying the wood products sector in the Lake States thus contributing to the region's overall economy." (p.197)

2443 Harris, T.G., Jr. and Reddick, M.S., 1986. **The role of Master Limited Partnerships in forest industry restructuring.** In: Mathews, E.E., ed. Proceedings of the 1986 Southern Forest Economics Workshop. pp.63-69.

2444 Hartler, N., 1987. **Technological advances in relation to the future supply of pulp fibres.** In: Food and Agriculture Organization, Proceedings of the Expert Consultation on World Pulp and Paper Demand and Supply Outlook, 1986. pp.125-133.

2445 Hoysted, P.A., Kellow, A.J., and McCuaig, M.A., 1984. **Woodchipping in Tasmania: An estimate of social costs and benefits.** In: Kellow, A.J., ed. Perspectives on forest policy in Tasmania. pp.145-168.

2446 Hubert, L., 1987. **[The French furniture market and its organization.]** Revue Forestiere Francaise 39:439-456.
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This report "examines the nature and degree to which the forest industries contribute to the national manufacturing value-added." (p.1)

2448 Jones, S.G., Massengale, R.A., French, T.A., and Barnickol, L.W., 1986. **Missouri forest industries 1986 directory of primary wood processors.** Missouri Dept. of Conservation, Forestry Division. 76 pp.
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2449 Jones, S.G., Massengale, R.A., French, T.A., and Barnickol, L.W., 1986. **Missouri forest industries 1986 directory of timber harvesting contractors.** Missouri Dept. of Conservation, Forestry Division. [68]pp.

2450 Jones, S.G., Massengale, R.A., French, T.A., and Barnickol, L.W., 1987. **Missouri forest industries 1987 directory of secondary wood processors.** Missouri Dept. of Conservation, Forestry Division. 38 pp.
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2451 Kaltenberg, M.C. and Buongiorno, J.B., 1986. **Growth and decline of the paper industry: an econometric analysis of U.S. regions.** Applied Economics 18:379-397.
The purpose of this study was to determine the reasons for the differences in growth of the paper and paperboard industries in the regions of the U.S. To that end, a theory of regional demand and supply was formulated.

2452 Karjalainen, L., 1987. **Future role of paper and paperboard in packaging.** In: Food and Agriculture Organization. Proceedings of the Expert Consultation on World Pulp and Paper Demand and Supply Outlook, 1986. pp.102-110.

2453 Keegan, C.E., III and Polzin, P.E., 1987. **Trends in the wood and**

paper products industry: Their impact on the Pacific Northwest economy. Journal of Forestry 85(11):31-36.
"This paper discusses the economic conditions in the Pacific Northwest, focusing on how declines in wood and paper products employment and labor income have affected the region's economy." (p.31)

2454 Kellison, R.C. and Zobel, B.J., 1987. Technological advances to improve the wood supply for the pulp and paper industry in developing countries. In: Food and Agriculture Organization. Proceedings of the Expert Consultation on World Pulp and Paper Demand and Supply Outlook, 1986. pp.136-144.

2455 Lintu, L., 1987. Evolution of the structure of pulp and paper supply. In: Food and Agriculture Organization. Proceedings of the Expert Consultation on World Pulp and Paper Demand and Supply Outlook, 1986. pp.112-121
A summary of statements received by the FAO Secretariat from 28 countries, plus a group statement on behalf of 22 Arab countries, regarding the present structure of the supply in their respective countries. Special attention was given to domestic production.

2456 Loffler, H., 1986. [Possibilities to improve the utilization and exploitation of coniferous sawlogs.] Schweizerische Zeitschrift fur Forstwesen 137:643-657.
A procedure for the optimization of the sawing output with coniferous logs is described. In German with French summary. (WK,WK)

2457 Lokken, L.F., 1985. Michigan's forest products industry development program: A progress report. Lansing, Governor's Office. 32 pp.

2458 Maki, W.R., Schallau, C.H., Foster, B.B., and Redmond, C.H., 1987. Tennessee's forest products industry: Performance and contribution to the State's economy, 1970 to 1980. U.S. Forest Service, Research Paper PNW-RP-386. 22 pp.

2459 Manriquez R., L.E., 1985. [Japan and its forest industry.] Ciencias Forestales 4(2):3-8.
In Spanish.

2460 Mathieu, R., 1987. The prefabricated housing industries in the United States, Sweden and Japan. Construction Review 33(4):2-21.

2461 McCuaig, M.A., 1984. The roots of the woodchip industry in Tasmania: A case study of the origins of Tasmanian Pulp and Forest Holdings Pty Ltd. In: Kellow, A.J., ed. Perspectives on forest policy in Tasmania. pp.97-123.

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2467 Poyry, J., 1987. **Finnish paper industry -- more than three hundred years of continuous change.** Nordic Pulp and Paper Research Journal, Special Issue, Aug.6,1987. pp.19-24.

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"The 54 respondents in this survey identified financial profit, planning for the future of the business, and leaving the land in good condition after harvesting as the most important characteristics of success." (p.56)

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2472 Science Council of Canada, 1987. **A sectoral approach to innovation: The case of the forest-product industries: A statement by the Science Council of Canada.** Ottawa, Science Council of Canada. 31 pp.
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2475 Sekot, W., 1987. [Economic investigation of external services in forest enterprises. Part 1: Hypothetical cost analysis.] Centralblatt fur das Gesamte Forstwesen 104:1-25. In German.

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2477 Sprague, E.D., comp., 1987. Massachusetts primary wood products industry directory 1987: Sawmill and timber harvesters. Massachusetts Dept. of Environmental Management, Division of Forests and Parks, Bureau of Forest Development. 77 pp. + app.

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2479 Tennessee Division of Forestry, 1986. Directory of Tennessee's forest industries 1985. Tennessee Dept. of Conservation, Division of Forestry; Tennessee Valley Authority, Forest Resources Development Program, TVA/ONRED/LER-86/4. 163 pp.
A directory of primary and secondary forest industries in Tennessee with indexes of equipment, type of plant, and products manufactured.

2480 Tennessee Valley Authority, 1986. Secondary forest products manufacturers; market void identification. Knoxville, TN, Tennessee Valley Authority, Office of Natural Resources and Economic Development, TVA/ONRED/L&ER 86/65. 42 pp.
The authors define a "market void" as that situation which exists "if raw materials or services are being purchased from outside a designated geographic region." (p.vi)

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"This article reviews the present and future use of wood for construction in several ASEAN (Association of Southeast Asian Nations) countries and suggests that future requirements will be met from some unconventional sources and with increased use of new technologies." (p.20)

2482 Texas Forest Products Laboratory, 1987. 1987 directory of forest products industries in Texas. Texas Forest Service, Circular 275. 94 pp.

2483 Tissot, M., 1985. Pulp and paper in ASEAN countries today and tomorrow. Bois et Forets des Tropiques 210:158-164.

2484 U.S. Bureau of the Census, 1987. **Lumber production and mill stocks, 1986**. U.S. Department of Commerce, Bureau of the Census, Current Industrial Reports MA24T(86)-1. 9pp.
An annual report showing total U.S. lumber production and year-end inventories for 1985 and 1986. Production is reported by state and by lumber industry region. Comparisons of U.S. production with imports and exports are shown.

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Includes domestic output data in addition to data on imports and exports.

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A compilation of 298 citations obtained through a computer search of the Agricola database. Only English language articles are included.

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"Telephone surveys of Maine households conducted in 1979 and 1980 indicate a transition to wood heating in response to a series of conventional energy price increases and uncertainty in conventional energy supplies." (p.i)

2494 Barros, N.F. de, coordinator, 1985. **[Planted forests in the Neotropics - a source of energy. Annals of a Symposium, Vicosa, Minas Gerais, Brazil, 1983]** Vicosa, Universidade Federal de Vicosa. 456 pp.

Sponsored by: Universidade Federal de Vicosa, Man and Biosphere/Unesco, International Union of Forest Research Organizations. Title also in Portuguese: "Florestas plantadas nos neotropicos como fonte de energia". Papers are in Portuguese or in English. Selected papers are indexed in this issue.

2495 Devlin, P.J., 1985. **Quantifying recreation: Allocation of value to the collection and burning of firewood in Colorado.** Ph.D. thesis, Colorado State University: Ann Arbor, MI, University Microfilms International. 251 pp. + app.

"This study identifies the importance of economic reasons for collecting and burning wood but concludes that other values... also rank highly." (p.iv) The author concludes that "the recreational benefits of firewood programs should be an important consideration when forest lands are being allocated for competing uses." (p.v)

2496 Durst, P.B., 1986. **Wood-supply options for Philippine dendrothermal power plants.** Philippine Lumberman 32(9):9-14.

Wood-supply costs were analyzed for 14 dendrothermal projects. A comparsion was made of the costs of procuring fuelwood on the open market or from plantations established to supply the plants.

2497 Earl, D.E., 1984. **Report on charcoal production.** Khartoum, Sudan, Energy Research Council-USAID; Sudan Renewable Energy Project, Report no.002. 57 pp.

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2498 Earl, D.E., 1985. **Sudan - the economics of wood energy production on**

mechanised farms. [Khartoum, Sudan] Energy Research Council - USAID; Sudan Renewable Energy Project, Report no.008; Energy Development International. 115 pp.

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2500 Hyman, E.L., 1987. **The strategy of decentralized production and distribution of improved charcoal stoves in Kenya**. In: Southgate D.D. and Disinger, J.F., eds. Sustainable resource development in the Third World. pp.151-157.

2501 Minnesota Dept. of Public Service, Energy Division, 1987. **Biomass Energy Cash Crop Project: Final report**. Minnesota Dept. of Public Service, Energy Division. Various pagings.
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2502 Musonda, W.M., 1986. **Fuelwood problems in the Teak Forests**. In: The Zambezi Teak Forests: Proceedings of the First International Conference on the Teak Forests of Southern Africa, Livingstone, Zambia, 1984. Ndola, Zambia, Forest Dept. pp.462-464.
The local people in Zambia depend on firewood for all of their domestic needs. The preferred species to use for fuelwood is Zambezi Teak. This paper discusses some short- and long-term solutions to the fuelwood problems in the Teak Forests.

2503 Nagle, G.S. et al., 1987. **The economics of residual fuel and fibre production on the B.C. coast**. Canadian Forestry Service, Pacific Forestry Centre, Information Report BC-X-289. 58 pp.
Co-authors are: M.R.C. Massie, G. Robinson, P. Oakley, and G.H. Manning. "The potential for a residual wood fibre industry on the B.C. coast was investigated using a simple model." (p.4)

2504 Pettenella, D., 1983. **The increase of fuelwood demand in disadvantaged areas**. In: Seminaire agriculture et foret, 5th, Nancy, 1983. pp.269-278.

2505 Pharo, J.A., 1982. **Wood as an energy substitute**. Ph.D. thesis, Michigan State University; Ann Arbor, MI, University Microfilms International 117 pp.
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2506 Rezende, J.L.P. and Pereira, A.R., 1985. **[Comparative production costs of energy from fuelwood.]** In: Barros, N.F.de, coord. Planted forests in the Neotropics. pp.348-370.
In Portuguese, with English summary.

2507 Shaikh, A.M., Kirmse, R.D., and Belrhiti, M., 1987. **Modeling fuelwood resources and demands in Morocco as a national planning tool**. In: Lund, H.G. et al., eds. Land and resource evaluation for national planning in the tropics. pp.425-430.

Fuelwood is the single most important source of household energy in Morocco.

2508 Wagstaff, F.J., 1987. **Economics of managing pinyon-juniper lands for woodland products.** In: Proceedings - Pinyon-Juniper Conference, Reno, NV, Jan.13-16, 1986. U.S. Forest Service, General Technical Report INT-215:168-172.

This paper briefly explores some of the economic implications of managing these woodlands as forests as an alternative to their conversion to grasslands. The primary focus is on fuelwood harvesting activities.

2509 Whitney, J.B.R., Dufournaud, C.M., and Murck, B.W., 1987. **An examination of alternatives to traditional fuelwood use in the Sudan.** Journal of Environmental Management 25:319-346.

"In this paper, a detailed discussion is presented of current local and national trends of fuelwood energy availability and consumption in the Sudan, and the associated environmental/economic costs and benefits." (p.320)

2510 Witter, D.J. and Jones, S., 1986. **Residential fuelwood use in Missouri, 1984-85.** Missouri Dept. of Conservation. 60pp.

The latest is a series of three studies monitoring the nature and extent of demands for fuelwood on Missouri's forest resources. The prior studies covered 1979-80 and 1981-82.

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2511 Ackerman, J.C., 1987. **Markets for solid and composite wood products for furniture and cabinets.** Forest Products Journal 37(10):11-12, 14-15.

2512 Adams, D.M., 1986. **Market forecasting in the forest products industry.** In: Douglas-fir: Stand management for the future. University of Washington, Institute of Forest Resources, Contribution 55:61-67.

2513 Araman, P.A. and Hansen, B.G., 1987. **Log, lumber, and veneer hardwood export markets.** In: Proceedings of the Central Hardwood Forest Conference VI, Knoxville, TN, 1987. University of Tennessee, Dept. of Forestry, Wildlife and Fisheries; U.S.F.S. Southern Forest Expt. Station; Society of American Foresters. pp.387-394.

Includes "a summary of the export situation, discussion of major U.S. export products and their importance, detailed information on major export markets for U.S. hardwoods, and likely short-term future developments in the hardwood export market." (p.387)

2514 Araman, P.A., 1986. **Pacific Rim demands for U.S. hardwoods.** In: Mathews, E.E., ed. Proceedings of the 1986 Southern Forest Economics Workshop. pp.45-52.

"The goals of this paper are to explain the differences between

U.S. domestic and export hardwood products and to discuss the shift and growth of our export markets." (p.45)

2515 Berg, R., 1987. **Softwood lumber.** In: Steele, T. and Williamson, T., comp. The continuing challenge: Competition and new products in the world forest products markets. pp.69-74.
Examines North American softwood lumber demand, softwood lumber productive capacity, production costs, and prices to the year 1989 at the regional level.

2516 Brannlund, R., 1987. **Disequilibrium and asymetric price adjustment once again; the case of the Swedish timber market.** Sveriges Lantbruksuniversitet, Institutionen for Skogsekonomi, Rapport 75. 26 pp.

2517 Buttoud, G. and Hamadou, M., 1986. **Trade in forest products among developing countries.** Unasylva 38(3,153):20-27.
Trade between developing countries has shown an average annual increase of 23% over the last 12 years. During the same period, total world trade increased by only 16% annually.

2518 Coalition for Fair Lumber Imports, 1985. **Chartbook.** Washington, DC, Coalition for Fair Lumber Imports. 21 pp.
A collection of charts relating to the U.S. lumber industry and Canadian lumber imports.

2519 Coalition for Fair Lumber Imports, 1986. [Statements.] Washington, DC, Coalition for Fair Lumber Imports. Var. pag.
A publication including 10 statements relating to Canadian lumber imports. Undated; probable publication date is 1986.

2520 D.G. Bell and Associates Inc., 1987. **Outlook for the treated lumber market.** Edmonton, Canadian Forestry Service, Northern Forestry Centre; Alberta Dept. of Forestry, Lands and Wildlife. 13 pp.
Date on title page, 1986; copyright, 1987. This report "provides an overview of the consumer market demand and treating supply for pressure treated lumber in Canada as of the fall of 1986." (p.1)

2521 Economic Commission for Europe and Food and Agriculture Organization, 1987. **Annual forest products market review.** Timber Bulletin 40(6):1-73.
Provides statistical information, supplemented with a commentary, on the forest products markets in the ECE region in 1986 and early 1987.

2522 Economic Commission for Europe and Food and Agriculture Organization, 1987. **Forest products trade flow data 1985-1986.** Timber Bulletin 40(7):1-85.

2523 Economic Commission for Europe and Food and Agriculture Organization, 1987. **Forest products statistics 1982-1986.** Timber Bulletin 40(5):1-64.
Includes statistics on production, imports and exports of forest products for Europe, USSR, Canada, U.S., Israel, and Japan.

2524 Economic Commission for Europe and Food and Agriculture Organization,

1987. **Monthly prices for forest products.** Timber Bulletin 40(8):1-58.

2525 Feng, T., 1987. **The role of nontraditional producers in world paper and board markets: Asian and Oceanian.** In: Steele, T. and Williamson, T., comp. The continuing challenge: Competition and new products in the world forest products markets. pp.18-19.

Reviews the potential to the year 2000 for producers in Taiwan, Korea, Peoples Republic of China, New Zealand, and Australia.

2526 Fleisig, H.W. and Miovic, P., 1987. **Long term prospects for developing countries.** In: Food and Agriculture Organization. Proceedings of the Expert Consultation on World Pulp and Paper Demand and Supply Outlook, 1986. pp.17-39.

This paper presents the World Bank, Economic Projection Department's assumptions about economic prospects in industrial countries and its projections for trade, lending, and economic growth in developing countries.

2527 Food and Agriculture Organization, 1987. **Monthly bulletin tropical forest products in world timber trade, Jan.-Feb., 1987.** [Rome]. Food and Agriculture Organization of the United Nations, FO: MISC/87/9. 55 pp.

2528 Food and Agriculture Organization, 1987. **Proceedings of the Expert Consultation on World Pulp and Paper Demand and Supply Outlook, Rome, Sept. 16-18, 1986.** Rome, Food and Agriculture Organization of the United Nations. 199 pp.

This publication includes the papers presented at the Expert Consultation on World Pulp and Paper Demand and Supply Outlook which convened in Rome in 1986 to review and discuss the implications of the Study on the Outlook for Pulp and Paper to 1995. Selected papers are indexed in this issue.

2529 Fuller, B., 1987. **New solid wood products in the 1990's: MDF and particle board growth potential.** In: Steele, T. and Williamson, T., comp. The continuing challenge: Competition and new products in the world forest products markets. pp.34-41.

2530 Fuller, B., 1987. **Panel products (softwood plywood, waferboard and OSB, hardboard).** In: Steele, T. and Williamson, T., comp. The continuing challenge: Competition and new products in the world forest products markets. pp.75-82.

Presents information on recent trends and short-term (1988) and medium-term (2000) forecasts of demand, supply, price, and foreign imports to the U.S.

2531 Granskog, J.E., 1987. **International trade and southern forests.** In: Proceedings of the Fourth Biennial Southern Silvicultural Research Conference, Atlanta, 1986. U.S. Forest Service, General Technical Report SE-42:8-12.

Recent trends for the principal wood products exported from the South are examined, and the outlook for southern wood products in foreign markets is discussed. (p.8)

2532 Haynes, R.W., 1986. **Domestic markets for forest products from the Douglas-fir region.** In: Douglas-fir: Stand management for the future. University of Washington, Institute of Forest Resources, Contribution 55:68-72.
A discussion of the historic and future trends in the product and stumpage markets in the Douglas-fir region.

2533 Hill, D.B., 1986. **Marketing Christmas trees.** University of Kentucky, Cooperative Extension Service, FOR-29. [3]pp.

2534 Hines, J.A., 1987. **Log export restrictions of the Western States and British Columbia.** U.S. Forest Service, General Technical Report PNW-GTR-208. 13 pp.
"This report presents the main features of log export restrictions imposed by various State and Federal agencies as well as by British Columbia." (p.1)

2535 Hoover, W.L., Eckelman, C.A., Ringe, J.M., and Youngquist, J.A., 1987. **Markets for hardwood laminated-veneer-lumber.** Forest Products Journal 37(10):57-62.

2536 Hpay, T., 1986. **The International Tropical Timber Agreement: Its prospects for tropical timber trade, development and forest management.** Cambridge, International Union for Conservation of Nature and Natural Resources. 19 pp.

2537 Jacobsen, J.M. and Luppold, W.G., 1987. **Determinants of hardwood lumber price.** In: Kossuth, S.V. and Pywell, N.A., comps. Current topics in forest research. U.S. Forest Service, General Technical Report SE-46:127-130.

2538 Japan Lumber Importers' Association, 1987. **Timber trade report, no.21, Oct., 1987.** Tokyo, Japan Lumber Importers' Association. 11 pp.

2539 Kalbfleisch, D.E., 1986. **International markets for Douglas-fir.** In: Douglas-fir: Stand management for the future. University of Washington, Institute of Forest Resources, Contribution 55:73-78.

2540 Lee, E.C., 1987. **Procurement systems and markets.** Forest Farmer 46(10):8-9.

2541 Lintu, L., 1986. **Marketing in the forestry sector.** Unasylva 38(3,153):10-19.

2542 Lovett, S.M. and Dean-Lovett, A.E., 1986. **The market for softwood lumber and plywood in the People's Republic of China.** Washington, DC, National Forest Products Association. 2 vols.
The National Forest Products Association 1986 China forest products market research report by DBC Associates, Inc. Researched and written by Stephen M. Lovett and Ann Elizabeth Dean-Lovett.

2543 Luppold, W.G., 1987. **The changing hardwood lumber market.** In: Proceedings of the Central Hardwood Forest Conference VI, Knoxville, TN, 1987. University of Tennessee, Dept. of Forestry, Wildlife and

Fisheries; U.S.F.S. Southern Forest Expt. Station; Society of American Foresters. pp.401-408.

2544 Lyons, B.E., 1987. **Markets for structural use materials to 2010.** Forest Products Journal 37(10):6-8.

2545 Maine, J.D., 1987. **Pulp and paper outlook: Printing and writing papers.** In: Steele, T. and Williamson, T., comp. The continuing challenge: Competition and new products in the world forest products markets. pp.41-51.
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2546 Murray, S., 1987. **Tariff cuts: Threat or opportunity?** Pulp and Paper International 29(7):50-51.
Paper companies in Australia are facing a possible cut in import tariff protection.

2547 Naskali, A., 1986. **[Concentration indices and buyer concentration in the roundwood markets in Northern Finland.]** Folia Forestalia 680. 44 pp.
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2548 National Forest Products Association, 1985. **Wood products international trade statistics: 1980-1985.** Washington, DC, National Forest Products Association, Economic Information Service. 4 vols.
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2549 Newman, D.H., 1987. **An econometric analysis of the southern softwood stumpage market:1950-1980.** Forest Science 33:932-945.

2550 Office National des Forets, 1987. **[The trade in wood in 1986 from the forests under state control, and the prices obtained at the main autumn sales of 1986.]** Revue Forestiere Francaise 39:172-186.
In French, with summaries in English, German, and Spanish.

2551 Orescanin, D., 1987. **[International market for timber, pulp and paper in the first half of 1987.]** Drvna Industrija 38(7/8):163-169.
In Serbo/Croatian with English summary.

2552 Peele, E.N., 1986. **Marketing of Teak Forests timber products.** In: The Zambezi Teak Forests: Proceedings of the First International Conference on the Teak Forests of Southern Africa, Livingstone, Zambia, 1984. Ndola, Zambia, Forest Dept. pp.357-364.

2553 Peterson, T.A., 1987. **Wisconsin forest products price review, November, 1987.** Timber edition. University of Wisconsin, Cooperative Extension Service. 5 pp.

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2554 Prins, K., 1987. **European timber: 2000 and beyond.** Unasylva 39(2,156):51-60.
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2555 Richardson, S.D., 1986. **The Cotchell report on the world's largest timber frontier: China.** Hong Kong, Cotchell Pacific Ltd. 99 pp.
A report covering the production and consumption of forest products in China, future requirements and trade prospects.

2556 Ringe, J.M., Graves, D.H., and Hansen, B.G., 1987. **Exporting hardwood lumber from Kentucky: Species, grades, and markets.** Forest Products Journal 37(10):72-76.
Hardwood lumber exporters in Kentucky prefer to export directly to foreign buyers and avoid middlemen to the extent possible. "The purpose of this paper is to characterize the markets served by these exporters and to outline their recommendations for successful hardwood lumber exportation." (p.72)

2557 Roldan, R.A. and Young, R.M., 1987. **The global economy: Outlook and planning issues.** In: Food and Agriculture Organization. Proceedings of the Expert Consultation on World Pulp and Paper Demand and Supply Outlook, 1986. pp.40-83.

2558 Schirmer, I. and Buongiorno, J., 1985. **[Contribution to the elaboration of a model of international trade of tropical logs.]** Bois et Forets des Tropiques 209:65-79.
In French, with summaries in English and Spanish. Models of the trade of tropical logs are presented for two regions: Africa Europe and Asia-Pacific.

2559 Schreuder, G.F. and Anderson, E.T., 1987. **International wood chip trade: Past developments and future trends with special emphasis on Japan.** University of Washington, College of Forest Resources, CINTRAFOR Working Paper 11. 33 pp. + app.

2560 Schulz, H., Glos, P., and Wegener, G., 1987. **[Technological and environmental influences on the timber market.]** Allgemeine Forst Zeitschrift 42:6-9.
In German. The demand for timber has decreased in the past years for different reasons. The article tries to show future possibilities of timber utilization. (WK,WK)

2561 Siuko, T., 1987. **International competition in forest products: The future role of nontraditional suppliers.** In: Steele, T. and Williamson, T., comp. The continuing challenge: Competition and new products in the world forest products markets. pp.13-18.
Nontraditional suppliers include producers in Latin America, Asia, Africa, Oceania, Iberian Peninsula, Eastern Europe, and the USSR.

2562 Steele, T. and Williamson, T., comp., 1987. **The continuing challenge:**

Competition and new products in the world forest products markets. Edmonton, Canadian Forestry Service, Northern Forestry Center; Alberta Dept. of Forestry, Lands, and Wildlife. 82pp.
This report summarizes the information presented at the annual Resource Information Systems, Inc. Conference held from Sept 23-26, 1986 in Boston, Mass. Selected papers are indexed in this issue.

2563 Sutter, C.A., 1987. **U.S. export markets booming!** Import/Export Wood Purchasing News 14(2):1,10,13.

2564 U.S. Foreign Agricultural Service, 1985. **Annual world market reports on forest products and forestry: Region: Africa (including Middle East.)** U.S. Dept. of Agriculture, Foreign Agricultural Service. Var. pag.
Market data for Egypt, Iraq, Ivory Coast, Saudi Arabia, and South Africa. Annual reports for Egypt, Ivory Coast and South Africa are for 1985. Reports for Iraq and Saudi Arabia cover 1984. Report distributed by National Forest Products Association, Washington, DC.

2565 U.S. Foreign Agricultural Service, 1985. **Annual world market reports on forest products and forestry: Region: Europe - non-EC countries.** U.S. Dept. of Agriculture, Foreign Agricultural Service. Var. pag.
Market data for Austria, Finland, E. Germany (1984) and for Sweden and U.S.S.R. (1985). Report distributed by National Forest Products Association, Washington, DC.

2566 U.S. Foreign Agricultural Service, 1986. **Wood market reports from the region of Asia: Australia, People's Republic of China, Indonesia, Japan, Malaysia, Philippines, Taiwan.** [Washington, DC, National Forest Products Association.] Var. pag.

2567 Waggener, T.R. and Vlosky, R.P., 1986. **Wood products as a worldwide commodity.** University of Washington, College of Forest Resources, CINTRAFOR Working Paper no. 7. [52]pp.

2568 Waghorne, K., 1987. **Packaging paper and board.** In: Steele, T. and Wiiliamson, T., comp. The continuing challenge: Competition and new products in the world forest products markets. pp.51-59.
Focuses on future market conditions for the fiber box, containerboard, boxboard, and kraft paper industries.

2569 Warren, D.D., 1987. **Production, prices, employment, and trade in Northwest forest industries, second quarter 1987.** U.S. Forest Service, Resource Bulletin PNW-RB-147. 74pp.
"Provides current information on lumber and plywood production and prices, employment in the forest industries, international trade in logs, lumber, and plywood, volume prices of stumpage sold by public agencies and other related items." (abst.)

2570 Welker, J.C., 1986. **A strategy of import substitution based on plantation wood production.** In: Mathews, E.E., ed. Proceedings of the 1986 Southern Forest Economics Workshop. pp.71-92.
"This paper discusses the general problem of determining the optimal strategy of investment in forest plantations for the purpose

of import substitution in a developing country." (Jamaica) (p.71)

2571 Wood-Products Stockpile Corp., Japan, 1987. **International trade in wood products, October, 1987.** Seattle, WSC, Japan; Tokyo, Nippon Mokuzai Bichiku Kiko. 10pp.

2572 Wood-Products Stockpile Corp., Japan, 1987. **Wood supply and demand information service, Nov., 1987.** Tokyo, Nippon Mokuzai Bichiku Kiko; Seattle, WSC, Japan. 31pp.

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CORRECTIONS

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1985

no.614, no.1623, no.2528 -- change Reunla to Reunala

cumulative author index 1985 -- change Reunla to Reunala

1986

no.1417 -- change Plumtre to Plumptre

no.1690 -- change Johansson to Johansson, B.

cumulative author index 1986 -- Johansson, B. -- add no.1690.

1987

no.415 -- change Russel to Russell

no.485 -- change Buongiorno, R. to Buongiorno, J.

no.563 -- change Inporters' to Importers'

no.590 -- change Nieuwhenhuis to Nieuwenhuis

no.1741, line 2 -- change 33rd to 34th

March, 1987 issue - table of contents:

Timber harvesting -- change p.47 to p.52
Timber supply -- change p.50 to p.55
Timber sales -- change p.51 to p.56

Cumulative author index 1987 -- please add the following cross references:

FAO see also Food and Agriculture Organization
Food and Agriculture Organization see also FAO